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AN INVESTIGATION OF STUDENT AND TEACHER PERCEPTION OF
A TRIMESTER SCHOOL IN RED DEER AND
TWO SEMESTER SCHOOLS IN EDMONTON, ALBERTA

by



BRYAN JOHN SPENCER REID

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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FALL, 1976

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled AN INVESTIGATION OF STUDENT AND TEACHER PERCEPTION OF A TRIMESTER SCHOOL IN RED DEER AND TWO SEMESTER SCHOOLS IN EDMONTON, ALBERTA submitted by BRYAN JOHN SPENCER REID in partial fulfilment of the requirements for the degree of Master of Education.

ABSTRACT

The purpose of this study was to examine the perceptions of their school year organization held by teachers and students working in trimester and semester school year organizations. These perceptions were recorded and analysed to test twenty-four hypotheses generated to answer the question: if teachers and students in a trimester system were asked certain questions about their school year organization would their answers differ significantly from those given by teachers and students working in a semester system if they were asked the same type of questions about the semester system?

A questionnaire was used to gather data from teachers and students working in a trimester school and teachers and students working in two semester schools.

Both inferential and descriptive statistical techniques were employed to analyse the data; differences between responses at or below the 0.05 level of significance have been reported.

A factor analysis revealed that the questionnaire was measuring six aspects of the respondent's attitude towards his school year organization. These aspects were identified as Learning Climate, Pace of Instruction, Teacher Student Relationships, Adjustment at High School, Work Load and Opportunity for Change.

The principal findings of the thesis were:

1. When the average scores on the factor for the three respondent student groups -- two semester schools and one trimester school -- were compared, no consistent pattern among the differences between groups could be distinguished; furthermore, the maximum difference

between the groups was less than 0.4 on a scale ranging from 1.0 to 5.0. Students tended to view their respective school year organization in a similar manner and were basically supportive.

2. Similarly, when the average scores on the factors for the three respondent teacher groups were compared no consistent pattern among the differences between the three groups could be distinguished. Differences between teacher scores ranged as high as 0.82 but could not be attributed to a difference in school year organization alone.

3. There is some evidence in the data to suggest that at Lindsay Thurber (trimester school) students most likely to report favourable opinions on the six factors were males, in Grade XII, taking more than three courses and had been in the school for three years.

4. Analysis of Jasper Place (semester school) student opinion according to the nominal data items revealed no consistent pattern among the differences.

5. Lindsay Thurber teachers most likely to be supportive of the trimester system were those who had been in the school for ten or more years.

6. Jasper Place teachers most likely to be supportive of the semester system held administrative positions and had been in the school for ten or more years.

7. Teachers of subjects containing an emphasis on empirical skills tended to be supportive of their form of compacted school year organization in either the semester or trimester system.

8. Teachers of subjects containing an emphasis on creativity and interpretation of knowledge tended to be less supportive of their form of compacted school year organization in either the semester or trimester systems.

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The assistance of Professors Bergen, Friesen and Ratsoy is acknowledged. The writer was invited to work as a research assistant on a project designed by these men and permitted to use the data gathered for the development of his own thesis. Out of the knowledge accumulated by this team grew the question to which this thesis is addressed.

Thanks are due to Dr Ron N. MacGregor, the external examiner, who provided valuable advice.

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CHAPTER I

1. INTRODUCTION

The Canadian community has broad expectations for its secondary schools. Education must meet the needs of the individual and society and be concerned with personal attitudes, personal attributes and moral values (Western Region Report, 1975:15). Rising costs make these goals increasingly difficult to achieve. Opinion surveys indicate that parents are interested in educational economy but not at the cost of quality (Gove, 1971). Educational administrators have responded to the twin challenges of economy and quality maintenance in a variety of ways, one of which has been experimentation with school year organization.

Historically, Alberta secondary schools have used a ten-month school year organization based on a time period commencing in September and terminating in the last week of June. The antecedents of this tradition are not clear. Phillips (1957:242) records that during the early part of the nineteenth century in Canada "Schools of the People" enrolled pupils for either a six months summer or winter term. By mid nineteenth century, however, he explains, many school districts had lengthened the school year to ten months duration. By way of illustration he cites the case of three masters of The Royal Institute of Schools in Bedford County. In 1832 they set up regulations to ensure that schools under their jurisdiction had a one month summer vacation, a Christmas break of two weeks and that they worked for five hours per day, five days per week. During the 1870's and 1880's school districts in British Columbia, Quebec, Ontario and New Brunswick attempted to

reduce school holidays and increase daily working hours. Such niggardly attitudes, argues Phillips (1957:243), were overcome by the beginning of the twentieth century and from then on it became established practice for Canadian schools to use a ten-month school year organization and to be closed during July and August. The rationale for this, suggests Phillips (1957:244), was increased prosperity, consideration for the children in the learning situation, and the establishment of summer courses for teachers.

In 1905 when the Province of Alberta was created, it inherited 560 school districts from the North West Territories (Chalmers, 1967:7). The Annual Report of the Alberta Department of Education (1906:11) points out that to ensure a smooth assumption of its new responsibilities the Department of Education adopted, in the main, many of the regulations and administrative precedents established by the Territorial Department of Education. The Report goes on to explain that the school year in 1906 included about 210 working school days. It is arguable from the above history that the so-called traditional ten-month school year organization practised in Alberta evolved from similar organizations throughout Canada. By the nineteen sixties, senior high school students enrolled in this organization took up to eight courses which they pursued throughout the ten-month time span and were awarded credits based on the final annual examination written near the end of June.

In 1949, the Red Deer School Board made a significant departure from this practice. At the Red Deer Comprehensive High School, the Board instituted a form of school year organization which called for three approximately equal terms; this became known as the trimester system. As a consequence of a number of historical events, this method

of school year organization appears to have evolved as a purely local creation aimed at meeting specific needs.

History of the Lindsay Thurber Trimester System

In 1947, School Superintendent Lindsay Thurber persuaded the Red Deer School Division, of which he was chief executive officer, to take over the A 21 army camp that had been erected on the outskirts of the Red Deer town site. His aim was to move the Red Deer City High School out of the buildings it occupied which were within city boundaries into the A 21 army camp. He then proposed to use facilities available at the camp to add industrial arts and home economics to the traditional secondary academic subjects previously offered by the Red Deer City High School.

Implementation of his plan required the support of two independent school jurisdictions, the Red Deer School Division and the Red Deer City School Board. He was in a unique position which enabled him to be influential with both authorities. As an inspector for the Alberta Department of Education he was responsible to the Provincial Government for educational standards within the Red Deer City school jurisdiction while concurrently he served as chief executive officer of the Red Deer School Division. Agreement to his proposal was granted by the Red Deer City School Board and the School Division so in 1947 the Red Deer Comprehensive High School commenced operations at the campsite.

Because of its camp facilities, the new school with some modification was able to offer dormitory accommodation to students. In the rural areas of Alberta access to secondary education was less readily available than was later to be the case; hence these dormitories attracted students from all over the province.

As the new Red Deer Comprehensive High School settled into operation, it soon became apparent that some students were not having their needs met by the traditional ten-month school year organization practised by the school. Many came from farming communities and had to interrupt their studies in order to return home to assist with seasonal activities such as harvesting. Veterans were also returning to complete high school education interrupted by warfare. These adults wanted to complete their courses as quickly as possible in order to reduce loss of earning.

R.L. Whitney, then principal of the school, had experienced short, intensive training courses while in the armed forces, and to meet students' needs he proposed introducing such courses as an alternative to the traditional ten-month year. Lindsay Thurber accepted this proposition and under his guidance evolved the trimester system. In 1949, the Red Deer Comprehensive High School was renamed the Lindsay Thurber Comprehensive High School and the trimester system came into existence. (Dawe, 1954)

Description of the Trimester Planⁱ

Under this system the academic year is divided into three approximately equal terms, ending during the first week in December, the second week in March and at the end of June, respectively. It is possible for a student to complete most courses during one of these terms, but in some cases the course is spread over two terms. Care is taken to ensure that total lesson time is the same as that offered under a ten-month system. Where a five credit course in a traditional school is allocated a total of 200 minutes of instruction per week over the ten-

ⁱ This description is based on an unpublished document entitled "An Examination of the Trimester System" which was made available by the Lindsay Thurber Comprehensive High School office staff.

month period, a similar five credit course under the trimester system would receive 600 minutes of instruction per week for the duration of a single trimester. Each course is considered a discrete unit examined at the end of the trimester, except where courses are spread over two trimesters. In this case instructional time is reduced to 300 minutes per week for each trimester with final examinations and gradings applied at the end of the second consecutive trimester. At the end of each trimester students are able to review their program and change their selection of courses. When a student fails a course he is able to repeat it the following trimester.

To reduce the time students lose when they change from lesson to lesson, the school day is divided into four periods.

Time distribution when a school day is divided into four periods;

9.00 a.m.	to	11.00 a.m.
11.00 a.m.	to	12.00 noon
1.00 p.m.	to	2.00 p.m.
2.00 p.m.	to	4.00 p.m.

All Department of Education regulations such as pre-requisites, subject restrictions and credit loads are adhered to by the Lindsay Thurber Comprehensive High School.

The following timetables illustrate some of the alternatives available to trimester students.

Table 1 is an illustration of a timetable for a Grade X matriculation student choosing Automotives 12 and Typing 10 as options. It totals 39 credits.

TABLE 1
TIMETABLE A

TIME	FIRST TERM	SECOND TERM	THIRD TERM
9 - 11	Lang. 10	Math. 10	P. E. 10
11 - 12	French 10	French 10	Typing 10
1 - 2			Typing 10
2 - 4	Auto. 12	Soc.St. 10	Chem. 10/ Biol. 10

Table 2 is an illustration of a timetable for a Grade XI diploma student desiring sequential courses in welding. It totals 38 credits.

TABLE 2
TIMETABLE B

TIME	FIRST TERM	SECOND TERM	THIRD TERM
9 - 11	English 23	Soc.St. 20	Welding 32
11 - 12	Lit. 21		Welding 32
1 - 2			Welding 32
2 - 4	Welding 12	Welding 22	Welding 32

Table 3 is an example of a timetable for a Grade XII matriculation student with no deficiencies who would normally concentrate on six compulsory courses. Free periods occur during each term because the student is taking two courses per term. These free periods may be used to repeat a failed course or to add an option.

TABLE 3
TIMETABLE C

TIME	FIRST TERM	SECOND TERM	THIRD TERM
9 - 11	Soc.St. 30	Chem. 30	English 30
11 - 12			Physics 30
1 - 2			Physics 30
2 - 4	Math. 30	French 30	

Table 4 is an example of a timetable for a Grade XII student who is switching to matriculation and attempting to secure all his mathematics in one academic year. This would be impossible in a ten-month system.

TABLE 4
TIMETABLE D

TIME	FIRST TERM	SECOND TERM	THIRD TERM
9 - 11	Math 10	Math. 20	Math. 30
11 - 12			
1 - 2			
2 - 4			

Table 5 is an example of a timetable for a Grade XII student (commercial pattern) who requires 28 credits to graduate and is attempting to secure this standing in only two terms.

TABLE 5
TIMETABLE E

TIME	FIRST TERM	SECOND TERM	THIRD TERM
9 - 11		Typing 10	Soc.St. 30
11 - 12		Psych. 20	English 30
1 - 2			English 30
2 - 4		Acct. 20	Acct. 30

Burgeoning of Interest in School Year Reorganization

At the Lindsay Thurber Comprehensive High School the trimester system of school year organization was applied in 1949 and has been used continuously for the last twenty-seven years.

Following the advent of the Canadian version of trimester, as the Red Deer scheme came to be called, a wide range of year organizational mutations occurred; in particular, there was a burgeoning of interest after 1966 when the Alberta Education Department changed relevant high school regulations. Expressions of this interest did not take the form of further trimester system experimentation, however; in this respect Lindsay Thurber Comprehensive High School was to continue to stand alone. An alternative form of school year organization known as the semester system came under consideration.

The Sixty - First Annual Report (1966:26) states that several schools appeared likely to experiment with the semester system during the coming year. Two years later in the Sixty - Third Annual Report (1968:34), the Department of Education was able to report as follows:

Although semestering in high schools was not a new phenomenon in Alberta, changes in regulations had enabled many more schools to adopt this type of programming. In several zones it was predicted that over half of the high school students would be registered in semestered courses in the school year 1968 - 69.

Loosely classified under the title semester system, these mutations divided the year into two approximately equal terms within each of which a student could complete five courses towards the High School Diploma. The first semester which began in the first week of September terminated in January, while the second semester began in February and was completed at the end of June. In most cases each day contained four, eighty minute periods, enabling a student to earn a maximum of twenty credits each semester towards the High School Diploma.

Wynn (1971:3) documented the history of semester system implementations from 1953, when Alberta College was the only Edmonton educational institution practising the semester system, until 1970 - 71. He stated that by 1971,

The public high schools in Edmonton had a total student population of 18,408 and a teacher population of 961 as of October 1970. Of these totals 9,591 students (52%) and 457 teachers (40%) were involved in the semester system.

Such statements demonstrate the alacrity with which Edmonton public high schools accepted the semester system. Figures released by the Department of Education in 1975 indicate that the trend has continued. They state that in the Edmonton public high schools 17,968 students were taught by 877 teachers and of these 13,393 students (75%) were involved in the semestered system. (Appendix D)

2. SEEKING A CRITERION FOR CHOOSING A PARTICULAR SCHOOL YEAR REORGANIZATION

Changes in student achievement would provide educational administrators with a useful criterion on which to base school year reorganization decisions. Several researchers, notably Girard (1962), Forsheit (1963) and Fehlberg (1968), have attempted to evaluate either trimester or semester systems in terms of student achievement. Fehlberg's thesis investigated whether students completing courses under the semester system of school year organization would achieve scores as high as students enrolled under the traditional type of high school organization. In his analysis, Fehlberg concluded that he could find no evidence to indicate that under the semester system student academic achievement was lower than the academic achievement of students studying under the traditional ten-month year. Semester students, he argued, did just as well as students working under a ten-month school year system on three out of the four subjects included in his research. Furthermore, on the fourth subject, Social Studies 30, semester students scored significantly higher marks.

Girard (1962) studied the trimester school year organization at Lindsay Thurber Comprehensive High School, in order to find whether there was a significant difference between the academic achievement of students studying under the trimester system and students studying under a traditional ten-month school year. The purpose of his study was to discover whether there was a significant difference in the gross achievements in English, Social Studies and Mathematics between Lindsay Thurber students and students from certain other selected Alberta high schools. Student numbers in these control schools were similar to those at

Lindsay Thurber and the communities wherein they resided were similar in size to the Red Deer community. Using students' scores on the Education Department's Grade IX examinations, Girard set up matched pairs each one containing a trimester student. Students' Grade IX scores were drawn from the years 1952, 1955 and 1958 and compared with their Education Department Grade XII scores in the subsequent years of 1955, 1958 and 1961 respectively. Analysis of his data failed to reveal any significant differences between the scores of students working in a trimester system and those working in a ten-month system on English, Mathematics or Social Studies.

A more recent study by Parks (1974) also failed to note a significant link between student achievement and school year organization. The relationship between student achievement and school year organization is by no means clear. Forsheit (1963), working in the United States of America, examined the passing marks achieved by students working under the ten-month school year organization and when comparing them with the passing marks achieved by students working under a semester system found the passing marks of students working under the ten-month year organization to be higher. Goldberg (1971) reported that his study implied that students who were likely to fail algebra performed no better when they spent increased time on this subject.

Research using academic achievement as the criterion variable has not yielded definitive results which could be used as a basis for administrative decisions regarding alternatives in school year organization. This being the case the opinions of those involved in the educative process may be sought as a basis for decision making. It is on this basis that the present investigation proceeds.

3. NEED FOR THE STUDY

Trimestering and semestering are now part of the Alberta educational scene, so it is important to assemble as many facts about these systems as possible. Because research studies using academic achievement as the criterion variable have not yielded consistent results, it is not surprising that educational administrators have given credence to the perceptions of students and teachers about their school year organization to form a basis for evaluation techniques. Such being the case, this study adds to available knowledge regarding school year organization. Furthermore, it may be argued that if these perceptions are to be seriously considered by administrators when they select a particular school year organization for their school, it is important to establish whether these perceptions differ from school to school. There appears to be a need to know whether trimester teachers' and students' perceptions of various aspects of their school year organization differ significantly from semester teachers' and students' perceptions of similar aspects of their school year organization.

4. THE PROBLEM

This study aims to examine:

1. the perceptions students and teachers at Lindsay Thurber Comprehensive High School (a trimester school) have about certain aspects of their school pertaining to school year organization;
2. the perceptions students and teachers at Jasper Place Composite High School (a semester school) have about certain aspects of their school pertaining to school year organization;

3. whether Bonnie Doon, Jasper Place and Lindsay Thurber High School students' perceptions of certain aspects of their respective schools differ significantly; and

4. whether Bonnie Doon, Jasper Place and Lindsay Thurber High School teachers' perceptions of certain aspects of their respective schools differ significantly.

5. DEFINITION OF TERMS

5.1 Compacted School Year

In this study the term "Compacted School Year" refers to any school year organization, other than the traditional ten-month system, where subjects normally taught over ten-months are covered in a shorter period of time, e.g. semester, trimester, 4 quarter system, quinmester, year-round school, etc.

5.2 Trimester System

In this study the term "trimester" refers specifically to the school year organization as practised at the Lindsay Thurber Comprehensive High School in Red Deer, Alberta. This system divides the school year into three approximately equal terms from the beginning of September to the end of June in the following year. Each day is divided into three two-hour periods, enabling students to complete a course of instruction in one term. Examinations are written at the end of each term and students demonstrating competence are awarded full High School Diploma credits. These credits are relative to the lesson time they have devoted to such a course.

5.3 Semester System

Due to variance within the literature of the use of the term "semester system" it will, in this study, refer specifically to the school year organization as practised at Jasper Place and Bonnie Doon Composite High Schools located in Edmonton, Alberta. These schools divide the year into two approximately equal terms, the first commencing in September and terminating at the end of January, and the second commencing at the beginning of February and terminating at the end of June. The length of class periods may vary but each term contains discrete courses examinable at the end of each semester. Five High School Diploma Credits are awarded for courses of 125 hours duration and three credits for courses of 75 hours duration.

5.4 Student Questionnaire

When the term "trimester student questionnaire" is used it refers to the questionnaire in Appendices A and C. The term "semester student questionnaire" refers to the questionnaire in Appendices G and I.

5.5 Teachers

When the term "teachers" is used in this study it includes subject teachers, librarians, counsellors and in-school educational administrators, except where the exception is made specifically in the text.

5.6 Teacher Questionnaire

When the term "trimester teacher questionnaire" is used it refers to the questionnaire in Appendices B and C. The term "semester questionnaire" refers to the questionnaire in Appendices H and I.

6. DELIMITATIONS

- (1) Only opinions from students and teachers attending Lindsay Thurber Comprehensive High School in June 1975 are considered.
- (2) Only the opinions from the students and teachers at the Jasper Place Composite High School in November 1975 are considered.
- (3) Only the opinions from the students and teachers attending Bonnie Doon Composite High School in November 1975 are considered.
- (4) Only subjective evaluative data are included.
- (5) No competitive or achievement data are included.

7. LIMITATIONS

This study is based on questionnaires and it must be noted that these may not portray an accurate or comprehensive picture of the opinions of students and teachers questioned.

Data analysed in this study consist of opinions of students and teachers based on their perceptions of certain types of school year organization. This study is unable to ascertain the accuracy of these perceptions.

The questionnaire has a built-in reliability device but this has limitations, and in the final analysis the validity and reliability of the questionnaire rely on the integrity of the respondent.

Undoubtedly the respondents' perceptions of school year organization will be influenced by more than the variables under review.

8. OUTLINE OF THE STUDY

Chapter I introduces the problem and outlines its historical antecedents. A brief history of the trimester and semester system is included as part of the discussion on the significance of the problem to educational administrators. The problem is outlined, research aims stated and a number of important terms defined. This chapter concludes with a statement of the delimitations and limitations of the study.

Chapter II contains an overview of the literature related to school year organization. A basis is provided for the conceptual framework upon which the study is based. This chapter also provides a summary of the findings of other researchers in this area. Upon these findings the research instruments used in this study were based.

Chapter III describes the respondent groups investigated, the instruments used and the methodology adopted to investigate the hypotheses. Statistical techniques used in this study are discussed.

Chapter IV reports the analysis of subjects' opinions about their respective school year organizations. This chapter also records the results attained by testing nominal data items against questionnaire items.

Chapter V contains the investigation of the hypotheses and the statement of findings resulting from testing them.

Chapter VI comprises a summary of the findings of this study, the conclusions of the researcher based on these findings and the implications for future practice and further research.

9. SUMMARY OF CHAPTER I

In Chapter I the problem was introduced and its historical antecedents outlined. A discussion of the evolution of the trimester and semester systems in Alberta was included. The need for the study and its significance to educational administrators was argued. A statement of the problem was followed by a definition of key terms and a limitation of the scope of this research. Chapter I concluded with an outline of the study.

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CHAPTER II

REVIEW OF THE LITERATURE

1. INTRODUCTION

As acceleration occurs in the rate of implementing school year reorganizations, the conceptual, promotional and testimonial literature continues to keep pace (Parks,1974). A review of this material lends itself to the development of a conceptual framework for the research recorded in this thesis.

Chapter II, which was based on literature identified by Bergen, Friesen and Ratsoy, begins by noting the continued interest in compacted school year organizations in America and Canada. Tables and figures are included to provide the reader with an overview of some typical designs being tried and the degree of implementation that is occurring. In particular, conditions acting as catalysts leading to school year reorganization in a school district are reported and discussed. These are likely to have a bearing on anticipated and later perceived advantages and disadvantages. Common catalysts cited in the literature are economic, demographic, educational and student needs. For the purpose of building the conceptual framework for this thesis, a bi-classification of educational and economic needs is presented. Educational needs refer to the broad spectrum of student needs, social, cultural, academic and vocational, which schools aim to serve. Economic needs refer to the financial cost of establishing, operating and maintaining the school system. They also include the cost to society and the student of the labour withheld while the student attends school.

After examination of scholarly writings related to those educational and economic needs a number of salient aspects of the compacted school year organization were selected. The most cogent of these, based on a classification proposed by Bergen, Friesen and Ratsoy, are listed in Table 6. Earlier writers have subjected all these topics to critical examination and research investigation. Their findings are reported extensively, later in the chapter, to give the topic a firm empirical basis for further research.

TABLE 6
RECURRING ASPECTS OF SCHOOL YEAR ORGANIZATION
DISCUSSED IN THE LITERATURE

-
- | | |
|----|------------------------|
| 1. | Student achievement |
| 2. | Learning retention |
| 3. | Student satisfaction |
| 4. | Teacher satisfaction |
| 5. | Curriculum revision |
| 6. | Curriculum flexibility |
| 7. | Cost |
-

Discursive and research writings from the field are analysed in this literature review to build up empirically the conceptual framework so that it accurately depicts the state of knowlege of the topic at this time.

What emerges from the studies is that many of the research findings were dependent on the opinions of teachers and students working in various types of compacted school year organization. This study used

a similar fact base to extend this knowledge. It goes further, however, by establishing hypotheses aimed at testing the degree to which the opinions of participants are influenced by the organization in which they work. Thus the study encompasses exploratory research to analyse teacher and student opinion about selected schools in Edmonton and Red Deer, Alberta. It also includes empirical research to test whether semester teachers' and students' opinions about the semester system differed from the opinions of trimester teachers and students when they were asked the same type of questions. Twenty-four hypotheses listed at the end of this chapter were generated to answer this question.

2. INTEREST IN THE COMPACTED SCHOOL YEAR ORGANIZATION

Interest in various forms of compacted school year organization intensified in Canada (King, 1975:15) and America (Parks, 1974) during the last decade. King (1975:15) pointed out that since 1970 the number of Canadian high schools changing from the traditional ten-month school year organization to a semester system of school year organization had increased in Alberta, British Columbia, Saskatchewan and Ontario. Parks (1974) used Campbell's (1973) survey of all American states, reported in Tables 7, 8 and 9, to provide some indication of the frequency and diversity of innovative practices in school year organization in the United States of America. Campbell's purpose was to assemble information pertinent to the year round school concept as his part in the planning for the Fifth National Seminar on Year Round Education in America in 1973.

In Table 7 the states contacted by Campbell are listed. Three important facts can be located by using the key at the bottom of the

TABLE 7

COMPOSITE DATA

STATES AND OUTLYING DISTRICTS IN SURVEY*

AL nr	KS nr	ND nr
AK L	KY op#1	OH #1
AS nr	LA no programs	OK #1
AZ op #5	ME no programs	OR #1
AR L	MD no programs	PA op #12
CA op #17	MA nr	PR nr
CZ nr	MI op #2	RI #3
CO op #4	MN op #1	SC #1
CT no programs	MS no programs	SD no programs
DE no programs	MO op #1	TN #2
FL op #6	MT #1	TX op #1 (2)
GA op #2 (1)	NB #1	UT op #1
GU Incomplete data	NV op #1	VT op #1
HI #1	NH op #2	VA op #8
ID no programs	NJ #9	VI #1
IL L op #1	NM #1	WA op #1
IN no programs	NY #1	WV no programs
IA #1	NC nr	WI #7
		WY #1

* Key - nr - no return, L - legislation, op operational

- number of programs in state

(1) There are other programs; data incomplete

(2) Statewide

page: the number of states that failed to respond; the number of states planning to institute legislation which would permit them to reorganize the school year; and the number of states with operating compacted school year programs.

Inspection of Table 8 reveals that one hundred programs were at the planning or operational stage and thirty-four states were involved.

TABLE 8
PROGRAMS PER STATE

AZ - 5	OR - 1
CA - 17	ML - 2
CO - 4	MN - 1
FL - 6	MO - 1
GA - 2 (1)	MT - 1
HI - 1	NB - 1
IL - 1	PA - 12
IA - 1	RI - 3
KY - 1	SC - 1
NV - 1	TN - 2
NH - 2	TX - 1 (2)
NJ - 9	UT - 1
NM - 1	VT - 1
NY - 1	VA - 8
OR - 1	VI - 1
OK - 1	WA - 1
WI - 7	
WY - 1	

(1) Incomplete data

Total 100

(2) Statewide

programs

Number of children involved 1973 - 374,000 approx.

Eighteen states had at least one operational system, three states had legislation pending and eight states did not return the survey forms. The number of programs being planned or operated within each state is illustrated in Table 8. Table 9 lists the various types of school year organization being practised in America and the number in each classification as located by Campbell (1973).

TABLE 9

THE NUMBER OF AMERICAN SCHOOL DISTRICTS TRYING VARIOUS TYPES
OF COMPACTED SCHOOL YEAR ORGANIZATION

TYPE OF PLAN	TOTAL	OPERATIONAL	STUDY PLANNING
Voluntary 4 - quarter	16	9	7
4 quarter 50 days working 15 days break	1	1	0
4 quarter 45 days working 15 days break	39	22	17
4 quarter 45 - 15 block	1	1	0
Staggered attendance	5	-	5
Flexible scheduling	3	2	1
Quinmester	6	3	3
Trimester	2	2	0
Extended summer session	2	1	1
6 - terms plus summer	1	0	1
Continuous progress	3	2	1
4 - 1 - 4 - 1	2	1	1
Not yet determined / under study	6	0	6
Not indicated	15	-	15

Examination of Table 9 indicates that at the time Campbell (1973) completed his survey the four-quarter system, wherein students worked forty-five days followed by fifteen days break was being used in more U.S. school districts than any of the others listed in the table.

Campbell has provided a system of categories into which the various types of school year organization commonly found in educational institutions and reported in the literature can be divided. School districts and individual schools have tended to adopt one of these, then modify it to suit their own particular needs. This means that terms such as semestering and trimestering have a certain in-built ambiguity which leads to some awkwardness when school year organization comparative research is attempted. It is possible, however, to describe the educational concepts embodied in the terms that are being used and then outline the parameters within which each concept is applied. There is a certain approximation in such a method which must be viewed with caution. From the researcher's standpoint, however, such a technique made the complexities of this topic more manageable and permitted him to build an experimental design based on known defined assumptions.

To define these assumptions the work of Scala (1971) was invoked. He attempted classification of the various types of school year organization using this approximating approach and deduced that six principal concepts could be defended. The work of Scala (1970) has been distilled and this is contained in Table 10.

The descriptions have been ordered within Table 10 according to the degree with which they segment the school year. They range from the semester system, which divides the school year into two approximately equal halves, through to the multiple trails plan which aims to remove the restrictions placed on a student by any segmenting of the school year. Each system aims, in its own unique way, to fulfil the economic needs of schools and the educational needs of students

TABLE 10

DESCRIPTION OF VARIOUS TYPES OF SCHOOL YEAR ORGANIZATIONS

SEMESTER SYSTEM	TRIMESTER PLAN	QUADRIMESTER PLAN
<u>Main Aim:</u> Improved range of courses. Students more able to plan own programs. Improvement in educational quality because fewer subjects are studied at one time.	Similar aims to the semester with more emphasis on students planning their own courses.	Aimed to provide year round service to students so they had multiple exit and entry points.
<u>Approximate Length of School Year:</u> 40 weeks	40 weeks	40 weeks
<u>Approximate length of School Day:</u> 5½ hours	5½ hours	5½ hours Sept. to July. 4½ hours July to August
<u>Approximate Length of Lesson Period:</u> 60 - 80 minutes	100 - 110 minutes	60 - 80 minutes
<u>Summer Session:</u> July - Aug. 4½ hr day	July - Aug. 4½ hr day	July - Aug. 4½ hr day
<u>Division of School Year:</u> Two even periods approx. 100 days; one summer session approx. 40 days.	Three trimesters of approx. 70 days each; one summer session approx. 40 days.	Four continuous periods of approx. 55 days

TABLE 10 (cont.)

DESCRIPTION OF VARIOUS TYPES OF SCHOOL YEAR ORGANIZATIONS

SEMESTER SYSTEM	TRIMESTER SYSTEM	QUADRIMESTER PLAN
<u>Grade Levels Included:</u> May be 7 - 12 or 10 - 12	May be 7-12 or 10-12	May be 7-12 or K-12
<u>Time Required to Effect Savings:</u> For grades 7-12, 5 years.	One and one-third years.	Two and one quarter years.
<u>Time Required to be Self Sustaining:</u> For grades 7-12, 5 years.	During the second year.	In 3 and 4 year plans, 1 year. In 5 year plans, 2 years.
<u>Vacations Beyond Normal Christmas and Spring Breaks</u> 4 weeks if summer session was applied.	4 weeks if summer session was applied.	4 - 7 weeks
<u>Time Available for Remedial or Acceleration Periods</u> Summer session if it was applied.	Trimester allowed students to accelerate according to ability.	Students could save up to one year in four.

TABLE 10 (cont.)

DESCRIPTION OF VARIOUS TYPES OF SCHOOL YEAR ORGANIZATIONS

CONTINUOUS SCHOOL YEAR PLAN	MULTIPLE TRAILS PLAN	EXTENDED K - 12 PLAN
<p><u>Main Aim:</u> This plan was based on the philosophy of continuous progress. Students had multiple exit and entry points.</p> <p><u>Approximate Length of School Year:</u></p> <p>200 - 210 days</p> <p><u>Approximate Length of School Day:</u> 5½ hours per day Sept. - June. 4½ hours per day July - August.</p> <p><u>Approximate Length of Lesson Period:</u> Suggested lesson module is 20 mins. and combinations, e.g. 40 mins, 60 mins and 80 mins.</p> <p><u>Summer Session:</u> Not part of basic plan; would have to be an extra session.</p>	<p>Based on the philosophy of continuous progress, students may pursue individual programs.</p> <p>210 days</p> <p>5½ hours per day</p> <p>Similar to Continuous School Year Plan.</p> <p>Not part of basic plan; would have to be an extra session.</p>	<p>This plan was a composite of other extended school year designs.</p> <p>204 - 225 days</p> <p>5½ hours per day</p> <p>Similar to Continuous School Year Plan.</p> <p>Not part of basic plan; would have to be an extra session.</p>

TABLE 10 (cont.)

DESCRIPTION OF VARIOUS TYPES OF SCHOOL YEAR ORGANIZATIONS

CONTINUOUS SCHOOL YEAR PLAN	MULTIPLE TRAILS PLAN	EXTENDED K - 12 PLAN
<u>Division of School Year:</u> None	None	May be 3 or 4 at high school level.
<u>Grade Levels Included:</u> K - 6, 1 - 6 or 1 - 8	7-12, 8-12 or 10-12	K - 12
<u>Time Required to Effect Saving:</u> In a 6 year plan, 5 years would be required before savings are effected.	Some immediate savings in teacher time and student acceleration.	Some immediate savings in teacher time and student acceleration.
<u>Time Required to be Self Sustaining:</u> 5 - 6 years	Immediately	May become self sustaining in 2 yrs.
<u>Vacations Beyond Normal Christmas and Spring Break:</u> 6 - 7 weeks	4 weeks	4 - 7 weeks
<u>Time Available for Remedial or Acceleration Periods:</u> Depends on the learning pace of the individual student.	Individuals travel at their own learning pace.	Depends on the combination of plans adopted.

3. THE CONCEPTUAL FRAMEWORK

The conceptual framework upon which this thesis is based is illustrated in Figure 1. It consists of four distinct sections. The first section contains the two catalysts most frequently mentioned in the literature as leading to school year reorganization. These catalysts, which are economic and educational needs, form the basis for the conceptual framework. They have been broken down by previous researchers into numerous sub-topics. Sub-topics selected to form the research base for this thesis are listed in the second section. Arrows connecting the first and second columns indicate a relationship between topic and sub-topic and guide the reader from a macro to a micro focus on known research. Later in the chapter known research findings are categorized under these headings and reviewed in detail,

The third column contains sub-topics that are based on the items in the Bergen, Friesen and Ratsoy questionnaire. Arrows between column two and three indicate a relationship between the known research findings and the proposed replication or extension of these investigations.

A regrouping of the sub-topics is contained in the last column. Arrows between column three and four indicate which sub-topics have been grouped to form summaries of the data for economy of presentation. Titles for these sub-topics were chosen by Bergen, Friesen and Ratsoy upon the identification of factors arising from an analysis of student and teacher responses.

Vertical arrows joining the sub-topics of column two and the formation of hypotheses at the bottom of the model indicate that the need for hypotheses arose out of the review of the literature. The development of these hypotheses is explained at the conclusion of Chapter II.

THE CONCEPTUAL FRAMEWORK

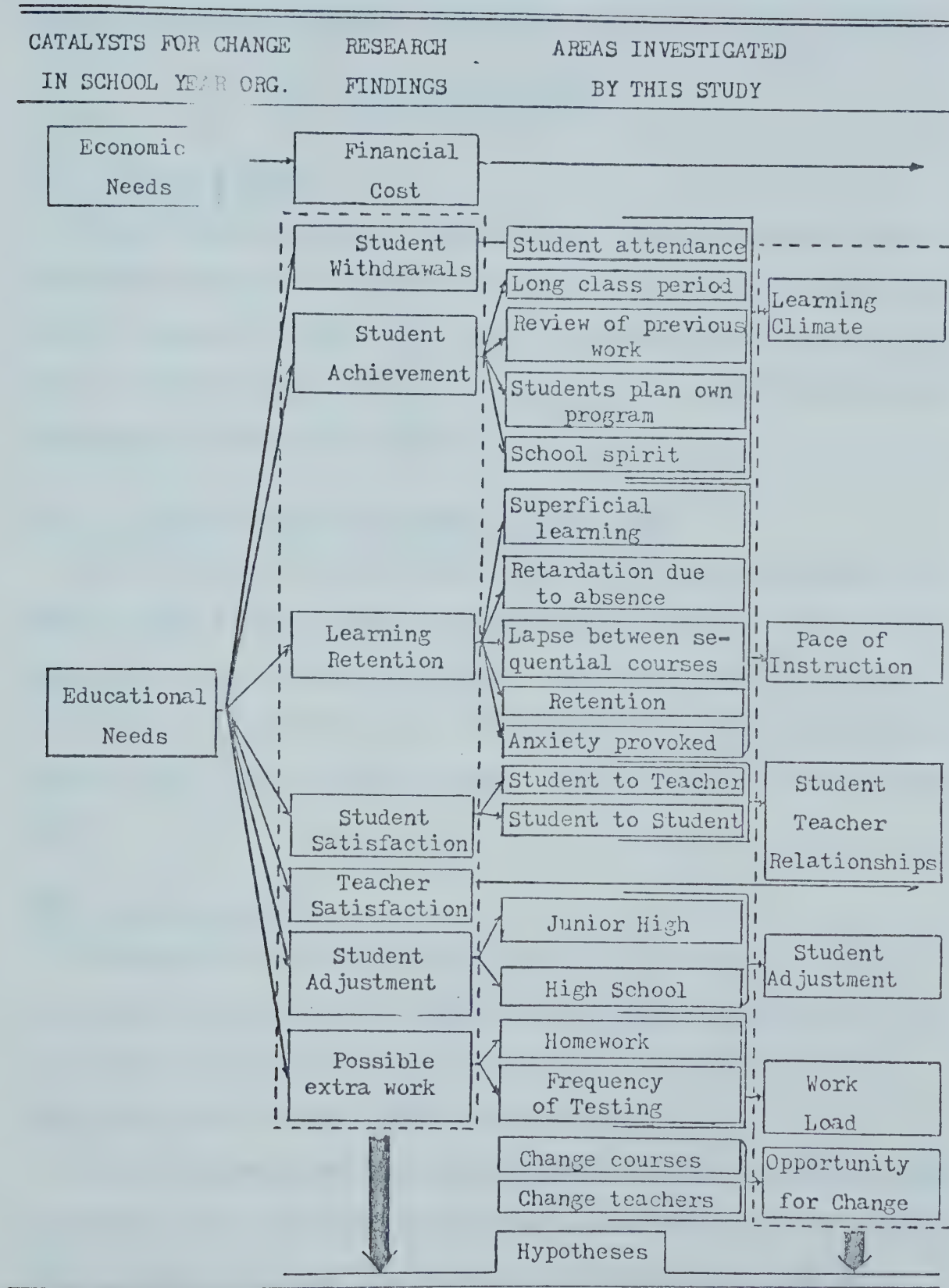


Figure 1.

Arrows joining the summary topics in column four indicate that data generated under these summary topics were used to test the hypotheses.

4. CATALYSTS FOR CHANGE

4.1 Economic Needs

Adams (1970) postulated that cost was a principal factor in motivating school boards to consider variations in school year organization. She did, however, concede that a desire to enrich present curricula, to help the disadvantaged child and to accelerate the gifted student also formed part of board deliberations.

4.11 Cost Saving and the Compacted School Year

The literature contains considerable discourse and research-based debate on the potential of various forms of the compacted school year organizations for reducing educational costs while preserving present standards of educational service. Educational cost in a society may be conceptualized into operational costs, capital costs and indirect social costs.

4.12 Operating Costs

Operating costs refer to day to day running expenses. Findings from the literature have been summarized and are presented in Table 11. All findings listed are a comparison of some form of the compacted school year with the traditional ten-month year.

There was disagreement among educational writers but studies seemed to indicate that substantial savings and operational costs were unlikely. Indeed, argued White (1966), the initial organization of a compacted school year was likely to lead to an increase in costs. Literature

examined by this writer indicated that in the longer term cost might be reduced slightly when schools adopted some form of year-round school organization. Coutts and Bergen (1969) cautioned that because as much as ninety percent of school costs consisted of staff salaries the potential for cost savings was limited. Studies of the semester and trimester systems, moreover, showed they were unlikely to bring about a substantial reduction in costs.

TABLE 11
REDUCING OPERATIONAL COSTS

AUTHORITY	TYPE OF SCHOOL YEAR	FINDINGS
Reiter (1965)	Trimester	Operating cost no higher
Bauman (1969)	Quarter system	Some costs would fall but teachers' salaries would rise
Coutts and Bergen (1969)	Semester	90% of school costs were teachers' salaries; therefore unlikely to bring about significant savings
San Diego Unified School District (Report 1970)	Quarter system	Operational costs higher
American Assoc. of School Administrators (Report 1970)	Year-round	Operational costs reduced
Wollaston (1974)	All Year Scheduling	Cost rose but students were permitted to graduate early
Salinas Union High School District (Report 1974)	Semester	No savings demonstrated but students permitted to graduate early

4.13 Capital Costs

Capital costs refer to money spent on school buildings and facilities. Table 12 contains a sample of research into capital cost

reduction when the traditional ten-month school year was compared with various examples of compacted school year organizations.

Manipulation of the school year organization could save money argued Bauman (1969). Bauman (1969) supported Reiter's (1965) argument as did the Report from the Education Turnkey System (1972). They each provided data to justify their claims that shorter courses led to more efficient use of school facilities, a reduction in the need for new buildings and elimination of overcrowding. It is important to add that these writers proposed the addition of a summer session.

TABLE 12

CAPITAL COST REDUCTION AND THE COMPACTED SCHOOL YEAR

AUTHORITY	TYPE OF SCHOOL	FINDINGS
Bauman (1969)	4 Quarter system	Reduced need for physical facilities
LaPlante (1973)	Trimester	Reduced need for new buildings
Nickerson (1971)	Lengthened	Better utilization of school facilities
Wollaston (1974)	All Year	Savings occur if there is a need to construct new buildings

Examination of Table 12 reveals that there was agreement among educational writers that if the need for a new school building in a school district was imminent then savings could be effected by intensifying the use of existing facilities. Where a form of compacted

school year organization facilitated this, it would lead to substantial savings of capital expenditure. Fenske (1971), however, cautioned that some additional cost in operating expenses would be experienced. Wollaston (1974) pointed out that in many instances school populations continued to rise; hence, intensifying the use of school buildings only postponed the need for new buildings rather than eliminating it. On the other hand, it may also be argued that some school populations rise to a peak and then steadily reduce as children grow up and move out to new suburbs, leaving inner city areas generally populated by older couples. Should this occur, a school district that hastened to build a new high school could find itself with large empty buildings. From the foregoing argument school authorities may deduce that under specially stressful conditions the compacted school year organization would lead to savings of capital expenditure.

4.14 Indirect Social Costs

Education involves an indirect social cost to the individual and to the community. Some efforts to implement forms of the compacted school year organization are explicit attempts to reduce these social or individual costs. Table 13 contains a sample of the research carried out to investigate this.

The longer students stayed in full-time education the higher the cost to society due to the withholding of the labour students could supply. Shorter courses allow academically gifted students to accelerate. An extrapolation from this supports the argument that shorter courses allowed children to graduate at different times of the year,

thus avoiding the annual flooding of the employment market, reducing the strains on student accommodation and lowering costs. Wright (1971) claimed that this resulted in a saving to society in general because it provided a more steady supply of labour.

TABLE 13

THE COMPACTED SCHOOL YEAR AND SOCIAL COSTS/BENEFITS

AUTHORITY	TYPE OF SCHOOL YEAR	FINDINGS
Henson (1974)	4 Quarter system	Students could combine study and part time work
Wollaston (1974)	All Year Schedule	Remedial opportunities and less time lost due to failing a course produces an economic as well as social saving
Salinas Union High School (1974)	Semester	Students were permitted to graduate early.
Brown (1975)	Trimester system	Provided lagging students with opportunity to catch up

From the students' viewpoint the compacted school year organization provided more opportunity for remediation and less time lost if a course had to be repeated. Graduation was likely to be achieved in a shorter time than under the traditional ten-month system and they were therefore likely to earn an income earlier.

4.2 Educational Needs

Any school board contemplating departure from the traditional ten-month system in favour of one of the six systems previously outlined, should consider what the studies said about the likely effects on student educational needs. Considerable research and discursive analysis are available.

TABLE 14

THE COMPACTED SCHOOL YEAR AND STUDENT ACHIEVEMENT

AUTHORITY	TYPE OF SCHOOL YEAR	FINDINGS
Parks (1974)	Quinmester compared with 10-month system	No apparent difference in math and reading achievement
Goldberg (1971)	Semester compared with trimester	Lower ability students performed better under semester system
Girard (1962)	Trimester compared with 10-month system	No effect of school year organization on student achievement
Evans (1972)	Semester compared with trimester	Trimester system resulted in more "A" and "F" grades
Russell (1973)	Year Round School compared with 10-month system	Slower students permitted to concentrate on fewer subjects may improve their performance

4.21 Student Achievement

Many writers have investigated the impact of compacted year organizations on student achievement and a sample of their findings is contained in Table 14.

Student achievement could improve in compacted courses claimed Goldberg (1971). Evans (1972) when comparing trimester and semester schools found there was an increase in the number of students scoring high grades. The rest of his findings, however, were in conflict with the arguments of Russell (1973). Evans (1972) found an increase in the number of students who scored low grades while Russell (1973) argued that slower students, able to concentrate on fewer courses, might improve their performance. Evans' (1972) findings were more convincing, being more firmly based on empirical research. Cautious interpretation of the literature indicated that student achievement in a global dimension was not reduced (Girard, 1962) under compacted school year organization and there was some indication that the number of students scoring "A" grades increased.

Although there is still some doubt whether shorter more intensive courses lead to improvements in total student achievement, improvement in some subjects, social studies (Fehlberg, 1968) and foreign languages (Tyler, 1970), has been demonstrated. Dorothy Tyler (1970) provided further support for this statement. She has reported the results of a project in which students were working in a school year organization that permitted the inclusion of a one-month intensive course in January. During this month the subjects of her research studied a foreign language to the exclusion of all other courses. In the four-week course students spent over ninety hours listening to and speaking the language and this was in fact more time than in the normal semester course. Emphasis during the course was on individual improvement rather than competition for grades. Individual progress, however, was carefully monitored throughout the course.

TABLE 15

STUDENT ACHIEVEMENT ON SPECIFIC SUBJECTS

AUTHORITY	TYPE OF SCHOOL	FINDINGS
Varner (1968)	Comprehensive survey of various school year organizations	Unable to identify a relationship between student achievement and school year reorganization
Fehlberg (1968)	Semestered System compared with ten-month system	Students showed improvement only in social studies
Tyler (1970)	Short Intensive Course	Students completed about one year's work in four weeks
Evans (1972)	Trimester compared with Semester System	Teacher opinion on whether students learned more under trimester differed according to subjects taught

At the commencement of the program the M.L.A. Co-operative Listening and Speaking Tests, Form L B (Princeton Educational Testing Service 1973) were administered. At the completion of the course upper level test (Form M B) was administered. Tyler (1970) reported that students gained about a year's progress in one month. She cautioned, however, against generalization, because the sample was very small.

In summary, research seemed to indicate that compacting the school year organization did not lead to a reduction in student achievement and in some selected courses student achievement might improve. In addition to this possible improvement in performance, reorganizing the school year facilitated student learning acceleration.

4.22 Learning Retention

Student acceleration is not warranted unless it is certain the added learning is retained. Proponents of school year reorganization have claimed that student retention of learning was not impaired (Stocker, 1974). Studies listed in Table 16 supported this claim.

TABLE 16

STUDENT LEARNING RETENTION AND THE COMPACTED SCHOOL YEAR

AUTHORITY	TYPE OF SCHOOL YEAR	FINDINGS
Stocker (1974)	Four Quarter system	Learning was retained over the short holiday break
Smythe (1973)	Semestered French	Forgetting after one semester lapse insufficient to justify extensive review programs
Evans (1972)	Trimester	A student's success in sequential courses was not significantly impaired by a lapsed trimester
King (1975)	Semester	Degree of forgetting which occurs over a summer-plus-fall semester interval was relatively slight

Smythe (1973) studying students learning French under a semester system generalized from his findings that insufficient forgetting occurred during a semester lapse between sequential courses to justify extensive review of old work before the commencement of new work in a later semester. Evans and King (1975:31) in studies listed in Table 16 were unable to find evidence that the time lapse between sequential courses in the trimester, semester and year round school systems was a significant impediment to student retention.

Clear evidence that short intensive courses improved student retention was not available but evidence has not been cited to show that it was significantly impaired.

4.23 Student Satisfaction

Although studies of student achievement and learning retention have attempted to control all relevant variables, their findings have been influenced by the fact that students liked the reorganization of the school year for reasons not related to learning. Student satisfaction was likely to be associated with student motivation. Changes in achievement and learning retention consequently may be related to student satisfaction. Studies which explore the relationship between student satisfaction and the compacted school year have been listed in Table 17.

Examination of Table 17 reveals that student satisfaction was positively related to a variety of forms of the compacted school year. The findings of these studies were supported by many others, some of which are outlined in the body of the proceeding text.

TABLE 17

STUDENT SATISFACTION AND THE COMPACTED SCHOOL YEAR

AUTHORITY	TYPE OF SCHOOL YEAR	FINDINGS
Coutts and Bergen (1969)	Semester	Students were not threatened with repeating a whole year if they failed a course
Johnson (1970)	Six semesters per year.	Learning could be fun if student realized his education was his business
Ellwood (1970)	Semester	Students indicated they worked harder on semester
Hutchings (1972)	Semester	More students gained higher level of education often in less time
Parks (1974)	Quinmester	34% of students planned to graduate early

Working with secondary school students the Valley View School District, Illinois (1972) claimed that their survey showed students' attitude towards school did not change after the introduction of the quadrimester system. Ducharme (1975) stated that 70% of his student sample reported that they were more relaxed working in a quadrimester system, and 85% of his teacher sample agreed with this student perception. Rife (1972) agreed that student apathy was reduced and a more co-operative atmosphere prevailed in the classroom. This may be explained by the fact that many students were likely to

fear failure less because they did not have to repeat a whole year (Coutts and Bergen, 1969) and had the opportunity to take the courses they want (Rife, 1972). It may be argued that improvement in student-teacher interaction was positively related to reorganization of the school year. Cautious interpretation of the evidence indicated that student satisfaction was increased by an opportunity to complete their education in a shorter time than under the ten-month school year organization (Mertes, 1969 and Wynn, 1971).

If student dissatisfaction was exacerbated by changes in school year organization, one way this might be manifested would be by changes in the withdrawal and drop-out rate of students. Mangham (1970) found that after a school year reorganization there was very little change in the drop-out rate, while King (1975) stated that he had evidence of a substantial increase in re-enrolment at the beginning of the second term in a number of Ontario schools that practised semestering.

4.24 Teacher Concerns About Completing the Program

Teachers were concerned that organizational change might make it difficult for them to cover the quantity of material required by the provincial curriculum guidelines (King, 1975:40). On this topic, King (1975:30) reported that teachers at the Stephen Leacock Collegiate Institute in Ontario gave the following opinions.

The coverage you are able to give the courses you teach is as full as in the traditional system.

	1971	1973
More Coverage	17.1%	29.0%
Less Coverage	43.9%	39.1%
No Difference	17.1%	23.2%
No Answer	21.9%	8.7%

When asked to explain their concern about this reduced coverage, teachers responded that in a forty-minute lesson period they had time to teach a skill, arrange practice and allot homework to assist consolidation of the learning. The longer period, being the equivalent of two lessons, contained too much material for students to ingest. Teachers in the Nanaimo Study (1969) claimed that they used a variety of time consuming teaching techniques to maintain student interest and while this resulted in less material being covered, student mastery was improved. Their responses to a question on mastery are listed in Table 18.

TABLE 18

MASTERY OF FACTUAL MATERIAL IN A SEMESTER SYSTEM

Do you think mastery of factual material was helped?

helped	40%
hindered	9.3%
no difference	38.1%
not applicable	7.2%
no opinion	5.4%

King (1973) found teacher attitudes to the long period varied according to the subject being taught. Teachers of subjects which involved practical work such as technical drawing, home economics or business courses, saw few problems being encountered. When giving instruction in French, Mathematics, Typing or Music, teachers indicated that shorter, more intensive periods every day of the year were more efficient. Data from the Nanaimo Study (1969) indicated that teachers of

English believed certain skills required time and contemplation to develop. Comprehension of some skills in English courses comes with maturity and shorter courses may not provide students with the opportunity to mature as is offered by the full year course. Despite these reservations, however, the general tenor of Ducharme's (1975) argument indicated that teachers liked a compacted school year.

TABLE 19

TEACHER SATISFACTION AND THE COMPACTED SCHOOL YEAR

AUTHORITY	TYPE OF SCHOOL YEAR	FINDINGS
Coutts and Bergen (1969)	Semester	Teachers had the opportunity to work and raise their income or take extended study leave
Dillingham Study (1971)	Trimester	Teacher reaction was favourable
Evans (1972)	Trimester	Teachers' support for the trimester varied according to the subject taught
Parks (1974)	Quinmester	Some teacher satisfaction with teacher/student relationships
Brown (1975)	Trimester	Provides teachers with greater opportunities to teach their special interest

4.25 Teacher Satisfaction and the Compacted School Year

The writers listed in Table 19 discussed the effect on teacher satisfaction of various forms of the compacted school year. Coutts and

Bergen (1969) argued that the semester system offered teachers the opportunity to work longer and make more money or to take extended study leave. The Dillingham Study (1971) reported that teachers liked working in the trimester system but Evans (1972) reported that teachers' support varied according to the subjects they taught. Brown (1975) argued that teacher student relations were improved because the trimester system reduced the number of daily teacher student contacts. Parks (1974), however, reported that when teachers experienced frequent rescheduling as in the quinmester they complained that teacher student relationships were disrupted.

The compacted school year offered teachers some advantages but this review failed to reveal extensive literature demonstrating that teacher satisfaction increased.

5. CHANGES THAT ACCOMPANY SCHOOL YEAR REORGANIZATION

5.1 Curriculum Revision

For short courses to be successful, argued Wollaston (1974), teachers must not take the old courses and either cover them more quickly or divide them up into smaller segments. There is a definite need for curriculum revision. McLain (1973:100) argued that many sequential courses could be made self sufficient because some pre-requisite courses were not, in fact, empirically related to the course for which they were listed as prerequisites. The Valley View School District 96 (Illinois) Report stated that reorganization invited restructuring of curriculum. Fenske (1971) discussed the quadrimester

and trimester systems, pointing out that teachers have the opportunity to provide students with a wider range of courses from which to choose. Schmid (1971) went on to show that with careful planning each course can contain greater variety and remediation opportunity for students than the traditional ten-month school year, especially when combined with longer lesson periods.

5.2 Variations in the Length of the Classroom Period

Secondary schools traditionally have divided the school week into forty-minute segments and apportioned a number of these to each subject according to subject status.

TABLE 20

AN EXAMPLE OF FOUR-DAY CYCLE TIME-TABLE,
TUMBLING PERIODS, VARIED PERIOD LENGTH

PERIOD LENGTH	DAY			
Minutes	1	2	3	4
35	English	French	Art	Geography
40	Phys. Ed.	Home Ec.	History	Science
55	Science	English	Home Ec.	Art
60	L U N C H	B R E A K		
35	History	Science	Phys. Ed.	Home Ec.
40	Art	Geography	English	French
55	French	History	Geography	Phys. Ed.
30	Home Ec.	Art	Science	English

Thus mathematics or English may be accorded six forty-minute periods per week while art may have received only two such periods. A typical pattern would be as follows: an eight-period day each of forty minutes duration and a ninth scheduled as a lunch period. Reorganization of the school year brought the forty-minute lesson period under scrutiny. By adopting a course credit system, where all subjects receive equal teacher student time for equal credit rating, a school can set up a modular timetable.

It is possible to vary the length of periods within a day and set up a four-day cycle accommodating eight subjects (King,1975) as demonstrated by Table 20.

Period length can be increased enabling the school to set up a timetable based on a one-day cycle. Thus a hypothetical student might have a timetable as described in Table 21.

TABLE 21

WEEKLY TIMETABLE FOR ONE-DAY CYCLE

PERIOD	LENGTH	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
One	80 mins	English	English	English	English	English
Two	80 mins	Math.	Math.	Math.	Math.	Math.
Three	80 mins	French	French	French	French	French
Four	80 mins	Soc.St.	Soc.St.	Soc.St.	Soc.St.	Soc.St.

The organizational advantage of such a timetable is its predictability for the students, teachers and the administration. King (1975) explains that such a timetable can be tumbled if school authorities believe students will find the routine boring.

5.3 Variations of Instructional Techniques

The longer lesson period would seem to demand that teachers vary their instructional techniques from those used in the traditional forty-minute period in order to maintain student interest. King (1975:17) found that teachers using the teacher-led discussion method were unable to sustain a class lesson of seventy minutes duration. Teachers in Ontario semestered schools, he stated, believed that variety in lessons was needed and there was clear evidence that they were providing it. In his study Ducharme (1975) found that seventy-five percent of teachers believed that they varied their teaching methods to accommodate to the long period. He noted, however, that only fifty percent of their students agreed with them. All teachers in this study saw themselves as successful in maintaining the attention of the students, eighty percent rated themselves as moderately successful and twenty percent as very successful. From the students' viewpoint the picture was not clear-cut. Ducharme (1975) reported that sixty-six percent of students claimed it was easy to maintain attention during long periods while thirty-three percent reported they experienced difficulty. The Valley View School 96 (Illinois) Report (1972) stated that students noted no change in apparent teacher fatigue and irritability. They also believed there was no significant change in their own work habits. Ducharme (1975) reported that teachers and students both agreed strongly that classroom atmosphere was more relaxed. It may be argued that a teacher got to know students better because of the longer time they spent together each day and because of the fewer students contacted by a teacher during a week.

6. TWO STUDIES SHOWING A DETAILED COMPARISON OF SCHOOL YEAR ORGANIZATION

When the year organization of a school is changed, an excellent opportunity for natural field research is offered. Shortly after the change a researcher can communicate with students and teachers who have had first hand recent experience in two types of school year organization. By giving their opinion in a comparison of two such systems they can provide valuable insights. A number of these comparisons have been analysed and recorded, and one by Mertes (1969) is included in this literature review.

6.1 A Report of a Change from a Semester System to a Quarter System

In 1966 Chabot College changed its college year organization from a semester to a quarter system. One academic year later students of the college were asked whether they preferred a semester school organization or a quarter system (Mertes, 1969). The population consisted of 233 students, of whom 173 were transfer students and 60 were preoccupational students. Of this population 92% were caucasian and the majority had been educated in high schools in the county within which the college resided. The main age range was nineteen to twenty-one years and most students lived at home receiving parental support for their college education. Of the students 65% lived in homes where the family income ranged from \$8000 to \$12000 per year. Students stated that a college education was important to them and 50% believed their greatest motivation came from their parents and immediate family. Most intended to prepare themselves for a vocation while 50% of the transfer students expressed the desire to complete a higher degree.

When the students were asked to state their opinion as to whether they preferred to study in a semester or quarter system they chose the quarter system with a ratio of two to one. The researchers interpreted this cautiously as they pointed out that the students were not given a definition of either system. It was interesting to note, however, that all students in the study had experienced one year of higher education under a semester system and one year under a quarter system.

Further analysis of the data revealed that student preference for the quarter system was, in fact, based on an idealized conception, not on their experiences. When asked to give reasons why their peers might prefer a quarter system, almost half the students stated they believed the quarter system offered more courses and increased interaction with faculty, and a further quarter of the students stated that students were less likely to experience a "course slump". Reasons favouring the semester system were: students had more time to explore ideas related to the course they were studying (44%), more chance of recovering from a poor start (29%) and more time to become familiar with the course they were studying (24%). Almost half the students gave their reason for rejecting the semester as the courses being too long to maintain their interest.

It is noteworthy that students expressed greater satisfaction with the level of knowledge they gained under the semester system. Over ninety percent believed they knew their faculty well compared to only fifty percent under the quarter system. Students were more comfortable with, and more confident in, the examination technique used in the semester system. Data confirmed, however, that while they were more

fearful of failure under the quarter system their cumulative grade point average rose. Mertes (1969) reported that this was indicated by an increase in the number of students who received both the top and bottom grades. She concluded from the overall data in the study that students were in favour of the quarter system and that the qualifications for their support were largely explained by the fact that many were taking too many courses. This was exacerbated by the administrative procedure which to students seemed better suited to the semester system.

6.2 A Study Comparing Trimester and Semester Systems

Evans (1972) compared trimester and semester systems by evaluating the following areas:

- (1) student achievement;
- (2) effect of a lapsed trimester between sequential courses;
- (3) changes in teaching styles stimulated by an extended class period;
- (4) the extent to which students would choose an extended curriculum over early graduation;
- (5) teacher fatigue and student attentiveness.

Research instruments consisted of classroom tests and a teacher opinionnaire. Results obtained from teachers and students working in the trimester system were compared with results obtained from teachers and students working in a semester system. Efforts were made to match the schools but two discrepancies were reported. Firstly, the semestered schools did not have a significant number of Mexican American students in contrast to the trimester schools, and secondly, semester students showed a higher academic aptitude.

Teachers indicated, on opinionnaires mailed to their homes, that

they were almost equally divided on the issue as to whether students were learning as much during a trimester as they had learned during the semester. In the trimester system teacher responses differed according to the subjects they were teaching. Teachers of industrial arts expressed substantial satisfaction with student achievement while teachers of English, vocational subjects and homemaking expressed general satisfaction with student achievement. Some concern was registered by teachers of history and business education but teachers of science and mathematics expressed considerable concern. Seeking an empirical verification of teacher opinions, the researchers gave equivalent tests to matched groups of trimester and semester students who were working on a common algebra course. Tests revealed no significant differences. Similarly no significant differences were found when semester and trimester student results were compared on chemistry scores, American history and on the Scholastic Aptitude Test. As the trimester system appeared to provide a greater opportunity for student acceleration, it seemed likely that the number of seniors planning early graduation would be greater under trimester than under the semester system. However, Evans (1972) found that the two groups did not differ significantly in plans for early graduation.

When teachers from each system were asked to list the proportion of time they spent on various instructional activities, their responses showed no significant differences. A significant majority of teachers working in the trimester system indicated that they did not suffer increased fatigue in the trimester system, nor did student attentiveness decrease. Finally, Evans (1972) found his evidence generally tended to be more supportive of the trimester system.

7. CONCLUSION OF THE LITERATURE REVIEW

Studies reviewed in this chapter have been selected by Bergen, Friesen, Ratsoy and the writer to provide an overview of the state of knowledge about the compacted school year at this time. This study aims to build on available knowledge using descriptive research.

8. STATEMENT OF HYPOTHESES

This research is based on the perception of students and teachers working in compacted school year organizations. Consequently it becomes important to ascertain whether these student and teacher perceptions vary from system to system. The question asked is will student and teacher perceptions of the trimester system differ significantly from student and teacher perceptions of the semester system, if respondents from each of the systems are asked the same type of questions?

The following hypotheses are tested in the investigation of the problem. As the theoretical framework does not permit prediction of the findings, directional hypotheses are inappropriate; hence, all hypotheses are stated in the null form and relate to the 32 items in the questionnaire.

8.1 Hypotheses Related to Student Samples

There is no significant difference between the mean scores of students from Bonnie Doon and Jasper Place Composite High Schools on each of the following dependent variables:

1. Learning Climate,
3. Pace of Instruction,

- 5. Teacher Student Relationships,
- 7. Student Adjustment at High School,
- 9. Work Load and
- 11. Opportunity for Change.

There is no significant difference between the mean scores of students from Bonnie Doon and Lindsay Thurber High Schools on each of the following dependent variables:

- 2a. Learning Climate,
- 4a. Pace of Instruction,
- 6a. Teacher Student Relationships,
- 8a. Student Adjustment at High School,
- 10a. Work Load and
- 12a. Opportunity for Change.

There is no significant difference between the mean scores of students from Jasper Place and Lindsay Thurber High Schools on each of the following dependent variables:

- 2b. Learning Climate,
- 4b. Pace of Instruction,
- 6b. Teacher Student Relationships,
- 8b. Student Adjustment at High School,
- 10b. Work Load and
- 12b. Opportunity for Change.

8.2 Hypotheses Related to Teacher Samples

There is no significant difference between the mean scores of teachers from Bonnie Doon and Jasper Place Composite High Schools on each of the following dependent variables:

13. Learning Climate,
15. Pace of Instruction,
17. Teacher Student Relationships,
19. Student Adjustment at High School,
21. Work Load and
23. Opportunity for Change.

There is no significant difference between the mean scores of teachers from Bonnie Doon and Lindsay Thurber High Schools on each of the following dependent variables:

- 14a. Learning Climate,
- 16a. Pace of Instruction,
- 18a. Teacher Student Relationships,
- 20a. Student Adjustment at High School,
- 22a. Work Load and
- 24a. Opportunity for Change.

There is no significant difference between the mean scores of teachers from Jasper Place and Lindsay Thurber High Schools on each of the following dependent variables:

- 14b. Learning Climate,
- 16b. Pace of Instruction,
- 18b. Teacher Student Relationships,
- 20b. Student Adjustment at High School,
- 22b. Work Load and
- 24b. Opportunity for Change.

9. SUMMARY OF CHAPTER II

In Chapter II the conceptual framework was explained as consisting of four sequential empirical sections; the catalysts for change, the review of current research, the detailing of areas in which this study proposed to extend present knowledge and the testing of hypotheses.

Catalysts that encouraged a school board to consider reorganizing the school year were classified dichotomously as economic needs and educational needs. Current research findings related to these areas were reviewed under the sub-headings, Operating Costs, Capital Costs, Indirect Social Costs, Student Achievement, Learning Retention, Student Satisfaction, Teacher Satisfaction, Curriculum Revision, Variations in the Length of the Classroom Period and Variation in Instructional Techniques.

Two natural field experiments were reviewed in detail. The first was a comparison of the semester and quarter systems. The second was a comparison of a trimester with a semester system.

The review provided a base for the research of this study. It also revealed that many writers assumed that teacher and student opinion of their school year organization varied from school system to system. Hypotheses aimed at investigating the validity of this assumption were developed.

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CHAPTER III

INSTRUMENTATION AND METHODOLOGY

1. INTRODUCTION

The following are presented in this chapter: outlines of the methodology and instrumentation used to describe the perceptions teachers and students, at the Lindsay Thurber Comprehensive High School in Red Deer, had of certain aspects of their school, and the perceptions teachers and students, at the Jasper Place Composite High School in Edmonton, had of certain aspects of their school. A description of data collected from Bonnie Doon Composite High School is included. These data, along with data from Lindsay Thurber and Jasper Place High Schools, are used to test the hypotheses listed in Chapter II. The methods used to test the research hypotheses are explained.

Section 2 contains a description of the groups of teachers and students whose opinions are used in this research.

In Section 3 the construction of the questionnaire used to gather data from teachers and students working in the Lindsay Thurber Comprehensive High School is explained. This section also describes the construction of the parallel questionnaire used to gather data from teachers and students working in the Edmonton schools.

Data gathering methods used in this study are presented in Section 4. Personal information provided by the teachers and students of each group is also reported and analysed in this section.

Statistical techniques used are described in Section 5.

In Section 6 the student nominal data items to be tested against

the questionnaire items are discussed. Teacher nominal data items to be tested against the questionnaire items are also discussed.

Section 7 contains a diagram of the research design to be used to test the twenty-four hypotheses.

Chapter III concludes with a summary of the chapter.

2. DESCRIPTION OF THE RESPONDENT GROUPS

The six groups involved in this study were as follows:

At Lindsay Thurber Comprehensive High School

Group 1: all teachers at the school on the 17th June, 1975;

Group 2: all students at the school on the same date;

At Jasper Place Composite High School

Group 3: all teachers at the school on 25th November, 1975;

Group 4: on the same date a "representative cross-section" of students was selected with administrative convenience being a partial criterion;

At Bonnie Doon Composite High School

Group 5: all teachers at the school on 25th November, 1975;

Group 6: on the same date a "representative cross-section" of students was selected with administrative convenience being a partial criterion.

Because of the manner in which respondent groups were constituted confident generalizations can only be made to the schools listed in this study. Generalizations to other trimester and semester systems cannot be made.

3. DESCRIPTION OF THE INSTRUMENT

The questionnaire used in this study was devised by Professors Bergen, Friesen and Ratsoy of the Department of Educational Administration at the University of Alberta. Initially this questionnaire was devised in order to investigate the operation of the trimester system. In order to establish a basis for the development of the questionnaire an extensive review of the literature on various systems of school year organizations was followed by interviews of teachers and students at Lindsay Thurber Comprehensive High School.

The same questionnaire was modified to make it applicable to a semester system. This was done mainly by substituting the word "semester" for "trimester" wherever the term occurred. Thus it could be used to obtain parallel information from the Jasper Place and Bonnie Doon Composite High Schools which are organized on the semester system.

These questionnaires contain thirty-two Likert type items to which subjects were asked to respond on a five point scale as follows: agree strongly, agree somewhat, undecided, disagree somewhat and disagree strongly. All items were scored 1,2,3,4 and 5 respectively. Open ended questions were added to obtain additional information.

Students and teachers from the trimester system were asked to respond to the original questionnaire. It was believed that students would give their opinion on topics encompassed by the items while teachers would give an opinion about these same topics based upon their experience and their observations of student behaviour. Teacher and student questionnaires were identical with the exception of the personal

data page which was attached to the front of the questionnaire.

Students and teachers of the two semester schools were asked to respond to the modified questionnaire. As in the trimester research, it was believed that students would give their opinion on topics encompassed by the questionnaire while teacher opinions would be based on their experience and their observation of student behaviour. Similarly, teacher and student questionnaires were identical with the exception of the personal data sheet which was attached to the front of the questionnaire.

3.1 Reliability of the Questionnaire

The accuracy or precision of a questionnaire is known as its reliability, states Kerlinger (1965:430). This study is dependent on data collected by use of a questionnaire; consequently the reliability of this instrument must be examined.

Four possible methods of calculating a reliability coefficient are noted in the literature.

- (1) Two equivalent tests may be administered to the same population. If the results yield a high correlation, the tests can be assumed to be reliable.
- (2) A test may be applied to a given situation and the results correlated with results received when the same test is applied to the same population after a time lapse. A high correlation indicates a highly reliable test. This method is usually referred to as the test-retest method.
- (3) In some situations a test may be divided into two equivalent

sets of items. Scores from these two halves are then correlated. This technique is often referred to as a split-half test of internal consistency.

- (4) Individual item analysis of variance yields an error variance and this indicates a measure of reliability.

The latter two can be applied only when the questionnaire test can be considered to be internally consistent. Examination of the factor analysis in Chapter IV reveals considerable inter-item correlation. Guilford (1965:450) explains that there is a direct relationship between the strength of the internal consistency index and the establishment and independence of factors. Because a factor analysis of data from Lindsay Thurber Comprehensive High School revealed six factors with high factor loadings the writer assumed the questionnaire to be internally consistent.

Based on this assumption a Kuder Richardson Split Halves Reliability Coefficient Formula was applied to the responses from students at Lindsay Thurber Comprehensive High School. From these computations a coefficient of 0.89 was derived indicating that the questionnaire had a high level of internal consistency.

4. DATA COLLECTION AND DESCRIPTION OF RESPONDENT GROUPS

4.1 Lindsay Thurber Comprehensive High School Student Group

On June 17th, 1975, the research team of Bergen, Friesen and Ratsoy visited the Lindsay Thurber Comprehensive High School and issued questionnaires to all students within the school on that day. In all a total of 758 usable questionnaires were returned. Of the respondents

1.4% were enrolled in Grade IX level work, 39.6% in Grade X, 26% in Grade XI and 33% in Grade XII. Of the students, 57% were female and 43% were male. From a breakdown into subgroups according to the number of years students had attended Lindsay Thurber Comprehensive High School it was found that 42.9% of the students had attended the school for one year, 28.4% for two years, 27.4% for three years and 1.3% for four years. A further breakdown indicated the number of courses students were taking in one trimester. Of the students, 13% were taking one course, 33% two courses, 46% three courses and 8% were taking four courses. Post high school plans of students indicated that 13.6% planned to attend an institute of technology, 32.6% a university, 26.8% to go to work and 27% had other plans.

4.2 Jasper Place Composite High School Student Group

Student questionnaires were delivered to the Jasper Place Composite High School on November 25th, 1975. The school administration assisted in distributing these to a selected sample of classes involving more than 10% of the students; of the 85% returned 83% were usable. Fifteen percent of the respondents were enrolled in Grade X level work, 50% in Grade XI and 35% in Grade XII. The respondents comprised 37% males and 63% females. When grouped according to the number of years students had attended Jasper Place Composite High School, it was found that 16% of the students had attended the school for one year, 43% for two, 34% for three and 2% for four years. A wide distribution occurred when students were classified according to the number of courses they were taking in one semester. This classification showed that none of the students were taking one course, 7% two, 11% three, 53% four and 29% more than four courses. When classified according to post high

TABLE 22

FREQUENCY DISTRIBUTION OF PERSONAL DATA

COLLECTED FROM STUDENTS AT

LINDSAY THURBER, JASPER PLACE AND BONNIE DOON HIGH SCHOOLS

ITEM	LINDSAY THURBER	JASPER PLACE	BONNIE DOON
<u>Grade Level</u>			
<u>IX</u> **	10	-	3
<u>X</u>	302	31	111
<u>XI</u>	197	104	98
<u>XII</u>	248	74	73
<u>Sex</u>			
Male	322	78	100
Female	434	134	185
<u>Years at School</u>			
One Year	322	33	119
Two Years	212	101	89
Three Years	205	72	72
Four Years	10	6	5
<u>Number of Courses *</u>			
One	96	-	-
Two	253	15	7
Three	343	24	43
Four	60	112	113
More than Four		61	104
<u>Plans for After High School</u>			
Institute of Tech	103	40	55
University	247	93	124
Work	203	46	61
Other	205	33	46

* During one trimester term for L.T.C.H.S.

* During one semester term for J.P. and B.D.

** Students enrolled in high school for special programs but who have not completed Grade IX.

school plans indicated by the students, it was found that 19% intended going to an institute of technology, 44% to a university, 22% to go to work and 15% had other plans.

4.3 Bonnie Doon Composite High School Student Group

On November 25th, 1975, student questionnaires were delivered to Bonnie Doon Composite High School. With the assistance of the school administration these were distributed to a selected sample of classes representing more than 10% of the student enrolment. Of the returned questionnaires 95% were usable. Among these respondents, 1% were enrolled in Grade IX level work, 39% in Grade X, 34% in Grade XI and 26% in Grade XII. The respondents comprised 35% males and 65% females. Further analysis revealed that 42% had been at the school one year, 31% two years, 25% three years and 2% four years. Of these students, none was taking one course, 2% two courses, 16% three courses, 42% four courses and 40% more than four courses. Post high school plans of the students indicated that 19% planned to attend an institute of technology, 44% a university, 21% to go to work and 16% had other plans.

4.4 Lindsay Thurber Comprehensive High School Teacher Group

On June 17th, 1975, a questionnaire was distributed to all teachers at Lindsay Thurber Comprehensive High School. Sixty-seven of these were returned which represented 79% of the group. Of these 24% described themselves as in-school administrators and 76% as teachers. To the question asking how long they had been at Lindsay Thurber, 24% of the respondents replied that they had been at the school for five years or less, 44% six to nine years, 26% ten to fifteen years and 6% more than fifteen years. A further breakdown showed that 35% of the

respondents had less than ten years professional experience, 36% ten to nineteen years and 30% had more than nineteen years of professional experience. Of the respondents, 82% held a Bachelor's degree, equivalent or less and 20% held a Master's degree or more. Furthermore, the respondents represented nine teaching subjects.

4.5 Jasper Place Composite High School Teacher Group

Teacher questionnaires were delivered to Jasper Place Composite High School on 25th November, 1975, and all teachers at the school were asked to complete one. A total of seventy-eight usable questionnaires were returned which represented 63% of the group. Of these 14% described themselves as in-school administrators and 86% as teachers. Respondents represented nine teaching subjects. Of the respondents, 37% had been at Jasper Place Composite High School for five or less years, 46% from six to nine years, 15% from ten to fifteen years and 2% had been at the school for more than fifteen years. The data showed that 51% of the teachers had less than ten years professional experience, 36% had ten to nineteen years and 13% had more than nineteen years. Furthermore, 77% held a Bachelor's degree, equivalent or less and 23% held a Master's degree or more.

4.6 Bonnie Doon Composite High School Teacher Group

Teacher questionnaires which were delivered to Bonnie Doon Composite High School on 25th November, 1975 were distributed to all teachers. A total of thirty-eight usable questionnaires were returned which represented 59% of the group. Of these respondents 16% described themselves as in-school administrators and 84% as teachers. The respondents represented nine teaching subjects. Further investigation

TABLE 23

FREQUENCY DISTRIBUTION OF PERSONAL DATA
 COLLECTED FROM TEACHERS AT
 LINDSAY THURBER, JASPER PLACE AND BONNIE DOON HIGH SCHOOLS

ITEM	LINDSAY THURBER	JASPER PLACE	BONNIE DOON
<u>Position in the School</u>			
Teachers	52	67	31
Administrators	16	11	6
<u>Subjects Taught</u>			
Business Ed.	7	7	7
English	10	1	5
Mathematics	5	8	6
Mod. Languages	4	3	0
Phys. Ed.	4	6	1
Science	9	11	4
Soc. Studies	8	8	5
Industrial Ed.	11	17	2
Fine Arts	5	8	1
<u>Number of Years at Present School</u>			
Five years and less	16	29	17
Six to nine years	29	36	9
Ten to fifteen	17	12	7
More than fifteen	4	1	4
<u>Years of Experience</u>			
Less than ten	23	40	13
Ten to nineteen	23	28	13
More than nineteen	20	10	11
<u>Professional Prep.</u>			
B.Ed,equiv.or less	56	60	26
M.Ed. or more	12	18	11

indicated that 46% of the teachers had been at Bonnie Doon for five or less than five years, 24% from six to nine years, 19% from ten to fifteen years and 11% had been at the school for more than fifteen years.

Further analysis revealed that 35% of the group had less than ten years professional experience, 35% had from ten to nineteen years and 30% had more than nineteen years. Furthermore, 70% had a Bachelor's degree, equivalent or less while 30% held a Master's degree or more.

5. STATISTICAL TREATMENT OF THE DATA

To investigate differences between the mean scores of groups, t-tests were used for comparisons between two groups and F-tests for more than two groups. This is valid according to Ferguson (1971:219), because $\sqrt{F} = t$ which applies even in cases where groups are of unequal size. In some instances research in this study involved the simultaneous relationships between more than two variables. When these multiple correlations were used it was necessary to make the assumption of homoscedasticity (Popham, 1973:75). A number of formulae were available and could have been used to obtain a correlation co-efficient regardless of the kind of data used. All that was necessary was the collection of two numerical scores for each subject. Acceptable inferences, however, could not be drawn from such a correlation unless the distribution of all the values of one set of scores had equal variability and was normally distributed in terms of the other set of scores (Popham, 1973:75). Such a condition is known as homoscedasticity.

For the purpose of this research homoscedasticity of the collected data was assumed and the Pearson formula was used to calculate correlation.

5.1 Descriptive Research

Scores on items one to thirty-two which were returned by students from Lindsay Thurber Comprehensive High School were factor analysed. The application of an arbitrary set of rules identified six factors. This differed from the Bergen, Friesen and Ratsoy study which applied a different set of rules and identified eight factors.

Responses from teachers and students from Lindsay Thurber and Jasper Place were then analysed to ascertain their mean perceptions for the items and the average scores for each factor. These mean scores were then tested against the nominal data items in order to investigate the relationship between such items and the perceptions of the subjects.

6. NOMINAL DATA ITEMS TO BE TESTED AGAINST QUESTIONNAIRE ITEMS

6.1 Student Nominal Data Items Examined

This study investigated certain nominal data items arising from the review of the literature related to compacted school year organization. Student perceptions of their school may have varied according to their maturity, the extent of their education and their proximity to graduation. This conjecture was investigated by a comparison of responses from students in grades X, XI and XII.

A second nominal data item examined by this study was the sex of the student. This variable was selected because of the researcher's belief that although the Alberta education system aims to provide equal opportunities for males and females, certain variances were likely to exist. It was possible that differences may have occurred in the selection of courses and in career expectations. Variability in social maturity and social expectations of high school students

could be related to sex. If any of these variables were significant in the school, sex-based differences of student perception of their school were likely.

The compacted school year was expected to provide students with increased motivation due to the short term goals. This effect may have been reduced when students were associated with this phenomenon for an extended period. The same type of argument could be applied to the opportunity for change provided by school year reorganization. Change is initially disruptive, but perhaps students become accustomed to this innovation and grow to like the novelty. Short-term courses also meant that students faced final examinations more frequently; hence they may have feared failure more than when they studied under the ten-month school year organization. Conversely, the intensity of this anxiety might be reduced by prolonged exposure to it. Put another way, students who had been in the system a long time might have learnt to live with this fear and hence conquered their anxiety. The relationship between the students' opinions and the length of time they had spent in the school year organization under review is the third nominal data item examined.

The compacted school year offers a student a greater opportunity to accelerate his academic progress than the traditional ten-month school year. Students who elected to accelerate may have had a different opinion of their school organization than students taking "average" or "below average" course loads. The relationship between the number of courses students were taking and their opinion of their school year is the fourth nominal data item examined.

A fifth nominal data item examined is students' post high school

plans. Post high school plans could have affected student selection of courses, attitude to acceleration, fear of failure and many other aspects of school year organization.

The following are the nominal data items examined by this study:

- (1) Student grade level,
- (2) Sex of students,
- (3) Number of years students had been in their school,
- (4) The number of courses students were taking in one school term, and
- (5) Students post high school plans.

6.2 Teacher Nominal Data Items Examined

Considerable empirical research and discursive analysis have been directed at teacher reaction to the compacted school year organization. Some of these writings were reviewed in this study and used to identify five nominal data items.

Teachers and administrators performed separate and distinct tasks in the school. Teachers had more face to face contact with students than administrators. They were also more affected by change in school timetables or school year organization which altered their movement around the building. Teacher workload was unevenly distributed throughout the week and they were likely to have definite preferences about period length and daily class load. Administrators on the other hand might experience more or less work, but their relationships with students were less likely to be affected by changes in school year organization. Their association with school year organization was probably of a more general nature and their work patterns were less likely to be changed. Consequently, the first nominal data item investigated was whether

teachers and administrative personnel differed in their attitudes towards the compacted school year.

Research indicates that teacher opinion is likely to vary according to the subjects being taught. Teachers of some subjects have argued that short courses allowed the total immersion of a student in subject matter free from the distractions of other courses. This, they argued, led to more efficient learning. Teachers of differing subjects, such as typing and mathematics, claimed that short regular practice throughout the year was superior. This study compares teacher responses in terms of the subjects being taught in order to verify other research findings.

Some educational personnel have seen more educational situations than others and, therefore, may have a different opinion about school year organization than their less experienced professional colleagues. Consequently the third nominal data item investigated was differences in teacher opinion about the school year organization practised at their school according to their years of experience.

Teachers' opinions towards the school year organization in which they work may vary according to the length of their stay. Those who prolonged their stay may have built up a loyalty to the institution while the dissatisfied ones may have moved out. This study examines the possibility of this variable being significant by noting any relationship between the subjects' opinions and the number of years they had been at their particular school.

Teachers and administrators with a high level of professional preparation could have knowledge and skills superior to those with less. This study investigates any difference in the opinions of the two groups.

The following are the teacher nominal data items examined by this study:

- (1) Differences in opinion between teachers and administrators,
- (2) Differences in teacher opinion according to the subjects being taught,
- (3) Differences among teachers according to their experience,
- (4) Differences among teachers according to their years in the school, and
- (5) Differences among teachers according to their level of professional preparation.

7. EMPIRICAL RESEARCH

EXPERIMENTAL DESIGN USED TO EXAMINE HYPOTHESES ONE TO TWELVE

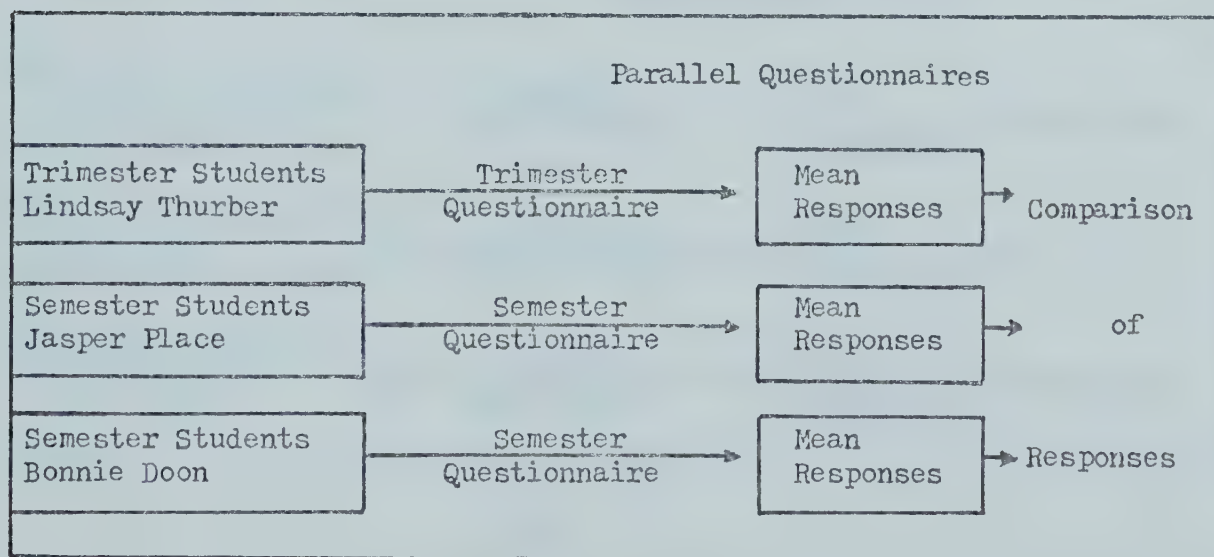


Figure 2

7.1 Student Groups

The student related hypotheses were tested by applying F-tests to the data supplied by these student groups responding to the parallel questionnaires. Where the intergroup variance differed significantly from the between-group variance, a Scheffé Multiple Comparison of Means Test was applied. The experimental design is illustrated in Fig. 2.

7.2 Teacher Groups

To test hypotheses related to teacher perceptions, responses of teachers from the three groups to parallel questionnaires were analysed by the application of F-tests. Where the intergroup variance differed significantly from the between-group variance, a Scheffé Multiple Comparison of Means Test was applied. The experimental design is illustrated in Figure 3.

EXPERIMENTAL DESIGN USED TO EXAMINE HYPOTHESES THIRTEEN TO TWENTY FOUR

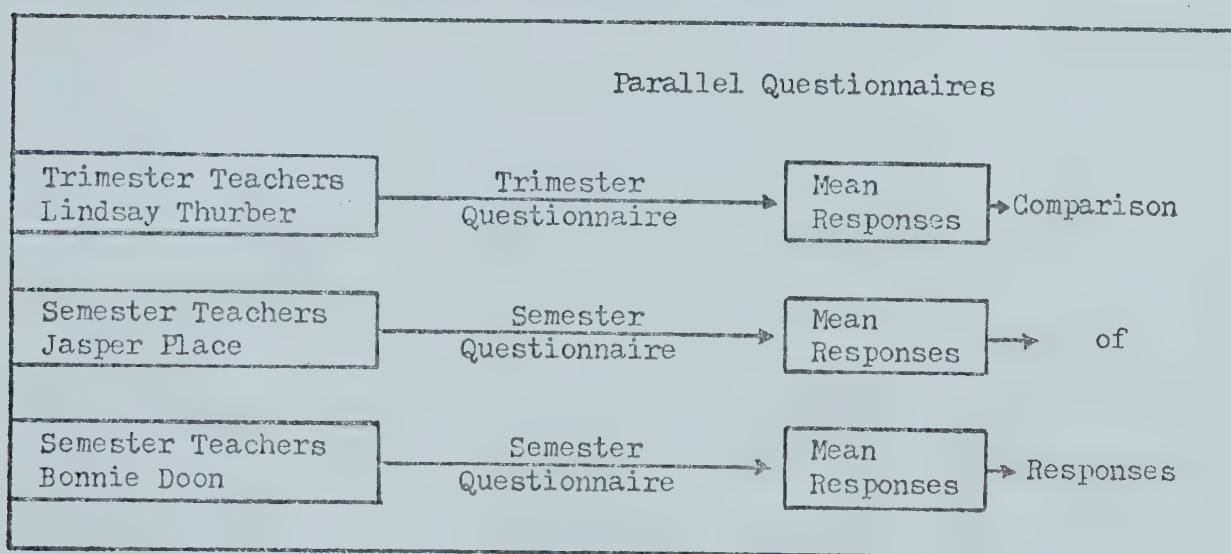


Figure 3

8. SUMMARY OF CHAPTER THREE

This chapter contained a description of the six groups included in this study from which data were collected. The method of obtaining groups and the implications of the methods adopted were discussed.

A description of the trimester instrument and the modified parallel questionnaire appropriate for the semester respondents was

presented in Section 3.

Data collection methods were described and the personal information provided by each respondent group was detailed in section 4.

Section 5 contained details of the statistical techniques applied in the data analysis. Experimental procedures adopted during the descriptive research section were described, the nominal data items to be examined were listed and the argument supporting their inclusion was presented in section 6.

Section 7 contains two diagrams to illustrate the method used to test the hypotheses which were outlined in Chapter II.

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CHAPTER IV

ANALYSIS OF THE DATA

1. INTRODUCTION

This chapter contains an analysis of the data collected. An outline of the chapter is detailed in Section 1. Section 2 is concerned with the factor analysis of the data collected from the students at Lindsay Thurber Comprehensive High School. Rules governing the acceptance of factors for this study are set out and the factors accepted have been described.

Each following section is a discrete entity, commencing with a table showing the degree to which respondents support a particular aspect of their school. Thus a quick overview of the findings is provided. Accompanying this table summary is another in which differences were recorded according to the nominal data items. The reader can therefore readily assess the extent to which these items appear to be related to the perceptions of the respondents. These tables are followed by a detailed analysis of the relevant data.

Section 3 contains an analysis of the data collected from students at Lindsay Thurber Comprehensive High School. The average mean score on each accepted factor has been computed and its significance noted. Analysis of variance techniques have been used to ascertain whether student perception on these factors varies according to the subgroups used by the study. Scores on individual items associated with the factors are then examined to reveal any apparent relationships.

Section 4 contains an analysis of the data collected from teachers

at Lindsay Thurber Comprehensive High School. Their average mean scores, on items associated with the factors identified in Section 2, have been computed. Analysis of variance techniques have been used to ascertain whether teacher opinion on those clusters of items varied according to the nominal data items selected in this study. Scores on individual items associated with these clusters of items were then examined to reveal any apparent relationships.

An analysis of the data from students at Jasper Place Composite High School is contained in Section 5. Items have been classified into the same factor groups as used in Section 2 of this chapter. Average mean scores for the factors have been computed. Analysis of variance techniques have been used to ascertain whether student opinion on these factors and on the individual items varied according to the student classifications used by this study.

Data collected from the teachers at Jasper Place Composite High School and the analysis of it are contained in Section 6. Their average mean scores, on the items associated with factors described in Section 2 of this chapter, have been calculated. Analysis of variance techniques have been used to ascertain whether teacher opinion on these clusters of items varied according to the nominal data items selected by this study. Scores on individual items associated with the factors were then examined and any apparent relationships discussed. This section concludes with a table showing the average scores on the factors for each of the groups used in this study. Data from Bonnie Doon Composite High School has not been analysed in this way because the researcher decided to include only one trimester and one semester school. The decision to choose Jasper Place was arbitrary.

2. THE FACTOR ANALYSIS

The responses to the 758 questionnaires collected from students at Lindsay Thurber Comprehensive High School were used to execute a factor analysis of the thirty-two items. Analysis of the printout after the application of the varimax method of rotation (Ferguson, 1971:424) indicated that six principal factors were being measured by the questionnaires. Acceptance of these six factors was defined by a set of rules. Items which failed to meet any one of the rules were rejected.

2.1 Rules Governing the Acceptance of Factors in This Study

1. Item loadings should be above 0.410, i.e. contribute 20% or more of the variance to the communality of the factor.
2. Item communality should be above 0.270.
3. Item loadings should be decisively on one factor only.
4. Items will be rejected if their second factor loading is less than 0.07 below the first factor loading.
5. Only items which, in the researcher's opinion, fit logically into a consistent classification can be included in any factor.
6. Factors will be examined to ensure they are meaningful to this study.

2.2 Items With High Factor Loadings That Fail to Reach Criteria

Student respondents reacted to the thirty-two item questionnaire on one of five opinions, agree strongly, agree somewhat, undecided, disagree somewhat and disagree strongly. These items were scored 1, 2, 3, 4 and 5 respectively and were assumed to vary by degree. The results of the factor analysis are shown in Table 24.

VARIMAX ROTATED FACTORS

COMMUNALITIES	1	2	3	4	5	6
1	0.431	-0.112	-0.007	-0.115	0.104	0.134
2	0.575	0.642	-0.198	0.098	-0.036	-0.165
3	0.575	-0.105	0.053	-0.078	-0.005	0.734
4	0.635	0.377	-0.677	0.166	0.040	-0.235
5	0.557	-0.197	0.005	-0.140	0.027	0.657
6	0.358	0.465	-0.123	-0.054	0.226	-0.118
7	0.511	-0.071	0.040	-0.622	-0.080	0.102
8	0.430	-0.214	0.031	-0.104	-0.027	0.157
9	0.367	0.067	0.107	-0.250	-0.066	0.119
10	0.362	0.502	-0.167	0.031	0.252	-0.014
11	0.377	0.528	-0.148	0.087	0.118	-0.040
12	0.568	0.318	-0.109	0.644	0.032	-0.164
13	0.494	0.557	-0.222	0.179	0.143	-0.153
14	0.550	0.658	-0.144	0.126	0.197	-0.058
15	0.632	0.474	0.569	0.171	0.109	0.195
16	0.507	0.122	-0.084	0.060	0.672	0.109
17	0.274	0.414	0.073	0.120	0.271	-0.100
18	0.434	-0.154	0.079	0.007	-0.096	0.161
19	0.358	-0.104	0.207	-0.015	-0.236	-0.093
20	0.557	0.065	-0.021	0.095	0.718	-0.168
21	0.521	-0.060	0.122	0.027	-0.200	0.363
22	0.706	-0.122	0.735	-0.055	0.016	0.096
23	0.612	-0.053	0.645	-0.040	-0.038	-0.093
24	0.278	0.074	0.083	-0.097	-0.243	0.097
25	0.559	0.172	0.481	0.509	0.194	0.007
26	0.526	-0.017	0.381	-0.542	-0.151	0.021
27	0.524	0.453	0.044	0.528	-0.061	0.137
28	0.401	0.384	0.036	0.052	0.463	0.319
29	0.292	0.370	0.037	0.176	0.089	0.319
30	0.452	-0.105	0.292	0.149	0.105	-0.123
31	0.273	-0.233	0.076	-0.160	-0.077	0.056
32	0.610	-0.355	0.110	-0.114	0.005	0.015
Percent of	11.6	10.82	7.86	6.31	5.45	5.07
Total variance						

It can be seen from examination of Table 24 that Item 15 has a high factor loading on Factor Two and Factor Three and meets the criteria of rules one, two and four. After examination of the item content, however, it was decided to invoke rule five and to exclude Item 15 from all factors. Item 19, which has a high loading on Factor One, is in the researcher's judgement more related to teacher student relationships (Factor Three), so accordingly it was rejected as not meeting the criterion of rule five. Items 21, 25 and 29 all fail to satisfy the criterion laid down by rule three. Further examination of Table 24 reveals that Item 28 has a high loading on Factor Two and Factor Five. The content of the item is not, however, according to the judgement of the researcher, clearly related to any of the six factors, hence it was rejected as not meeting the criterion laid down by rule five.

The following factors thus are selected from Table 24.

2.21 Factor One: Learning Climate

TABLE 25

FACTOR LOADINGS ON ITEMS CHOSEN FOR INCLUSION IN FACTOR ONE
(N = 758)

ITEM No.	FACTORS					
	1	2	3	4	5	6
1	<u>0.614</u>	-0.112	-0.007	-0.115	0.104	0.134
8	<u>0.589</u>	-0.214	0.031	-0.104	-0.027	0.157
9	<u>0.520</u>	0.067	0.107	-0.250	-0.066	0.119
18	<u>0.596</u>	-0.194	0.079	0.007	-0.096	0.161
24	<u>0.430</u>	0.074	0.088	-0.097	-0.248	0.097
30	<u>0.536</u>	-0.105	0.292	-0.149	0.105	-0.123
31	<u>0.422</u>	-0.233	0.076	-0.160	-0.077	0.056
32	<u>0.677</u>	-0.355	0.110	-0.114	0.005	0.015

TABLE 26

LIST OF THE STATEMENTS ASSOCIATED WITH FACTOR ONE

-
-
1. The short term of a trimester motivates students to work harder.
 8. The longer class period of a trimester helps students achieve greater understanding.
 9. The longer class period provides time for more variety in classroom activities.
 18. The trimester system encourages students to attend classes regularly.
 24. Teachers at Lindsay Thurber review previous work at the beginning of a trimester before going on to new work.
 30. The trimester system aids in the development of a good school spirit.
 31. The trimester system provides students with the opportunity to plan their own program.
 32. The trimester system results in better student achievement than do other arrangements.
-
-

Description of Factor One

Learning Climate: Table 25 contains all items that meet the required criteria. The statements involve student reaction to the motivating effect of the trimester system, the assistance it gives to students in understanding their work and the opportunity it provides for variety in classroom activities. They also encompass reaction to whether teachers review previous work at the beginning of a trimester before going on to new work; opinions on the contribution made by the trimester system to school spirit; whether students have an opportunity to plan their own program; and whether student achievement is better than under other school year organization. These items all relate to the learning climate at Lindsay Thurber Comprehensive High School.

Many students at Lindsay Thurber are older than the compulsory school attendance age; therefore they are attending school on their own decision. It is not surprising that large numbers appear to be thinking about the learning climate at the school.

2.22 Factor Two: Pace of Instruction

TABLE 27

FACTOR LOADINGS ON ITEMS CHOSEN FOR INCLUSION IN FACTOR TWO

(N = 758)

ITEM NUMBER	FACTORS					
	1	2	3	4	5	6
2	-0.292	<u>0.642</u>	-0.198	0.098	0.036	-0.165
6	-0.243	<u>0.465</u>	-0.123	-0.054	0.226	-0.118
10	0.107	<u>0.502</u>	-0.167	0.081	-0.252	-0.014
11	-0.230	<u>0.528</u>	-0.148	0.087	0.118	-0.040
13	-0.242	<u>0.557</u>	-0.222	0.179	0.143	-0.153
14	-0.194	<u>0.658</u>	-0.144	0.126	0.197	-0.058
17	0.020	<u>0.414</u>	0.073	0.120	0.271	-0.100

TABLE 28

LIST OF THE STATEMENTS ASSOCIATED
WITH FACTOR TWO

- | | |
|-----|---|
| 2. | Two terms during the year, rather than three would help students to perform better. |
| 6. | Taking a course in a short trimester term makes for superficial learning. |
| 10. | In a trimester, missing a few classes really sets a student back in his progress. |
| 11. | The lapse in time between sequential courses, such as Math 10 and Math 20, is too long. |
| 13. | Students forget more when they cover a course in one trimester instead of a longer period of time. |
| 14. | Students find the pace of instruction in a one trimester course too fast. |
| 17. | Students fear failure more in one trimester course than they do for a course spread over more than one trimester. |

Description of Factor Two

Pace of Instruction: Table 27 contains all items that meet the required criteria relating to Factor Two. They require student opinion on whether the pace of instruction in a trimester is too fast; whether a reduction in pace would help students perform better; whether the trimester results in superficial learning; and whether students find their retention is weaker under a trimester system. They also seek an opinion on whether missing a few classes sets a student back in his educational progress and on whether the close proximity of examinations increases a student's fear of failure.

Trimester school year organization is associated with the idea of reducing the number of months a student is involved with a course of instruction, while still retaining the total number of minutes of lesson time available under a ten-month school year. If the lesson time remains the same students may have been thinking in terms of calendar months when they responded to items suggesting that the pace of instruction in the trimester was too fast.

2.23 Factor Three: Teacher Student Relationships

TABLE 29

FACTOR LOADINGS ON ITEMS CHOSEN FOR INCLUSION IN FACTOR THREE

(N = 758)

ITEM NUMBER	FACTORS					
	1	2	3	4	5	6
4	0.022	0.377	<u>-0.677</u>	0.166	0.040	-0.235
22	0.371	-0.122	<u>0.735</u>	-0.055	0.016	0.096
23	0.425	-0.053	<u>0.645</u>	-0.040	-0.038	-0.093

TABLE 30

LIST OF STATEMENTS ASSOCIATED WITH FACTOR THREE

-
-
4. One trimester is too short a time to get to know a teacher.
 22. Students at Lindsay Thurber Comprehensive High School get to know their teachers quite well.
 23. Teachers at Lindsay Thurber Comprehensive High School get to know their students quite well.
-
-

Description of Factor Three

Teacher Student Relationships: Table 29 contains all the items that meet the required criteria relating to Factor Three. Statement four has a negative loading but is acceptable because the value can be reflected. Students responded to statements which involved opinions on the opportunity available for a student to get to know teachers and to evaluate this relationship.

The learning situation involves the teacher and learner in a number of personal relationships. It is not surprising to find, therefore, this factor evident in the responses from most students. Parks (1974) also found that students studied by him were concerned about their relationships with teachers and whether these would be affected by a shortened educational program.

2.24 Factor Four: Student Adjustment at High SchoolDescription of Factor Four

Student Adjustment At High School: Table 31 contains four items with high loadings on Factor Four. By reflecting the loadings of statement seven and twenty-six, it is possible to include the four items as meeting the criteria relating to Factor Four. The statements measure student opinion on the problems of transferring in from junior high school or another high school. They also measure student opinion about adjustment problems encountered when they come from junior high but commence their education at Lindsay Thurber at the beginning of the academic year.

TABLE 31

FACTOR LOADINGS ON ITEMS CHOSEN FOR INCLUSION IN FACTOR FOUR

(N = 758)

ITEM NUMBER	FACTORS					
	1	2	3	4	5	6
7	0.316	-0.071	0.040	<u>-0.622</u>	-0.080	0.102
12	-0.117	0.318	-0.109	<u>0.644</u>	0.032	-0.164
26	0.235	-0.017	0.381	<u>-0.549</u>	-0.151	0.021
27	-0.124	0.453	0.044	<u>0.528</u>	-0.061	0.137

TABLE 32

LIST OF STATEMENTS ASSOCIATED WITH FACTOR FOUR

-
-
7. Students have hardly any problems in transferring in from junior high school.
 12. Students have difficulty in adjusting to the trimester system when they come from the junior high school.
 26. Students have no difficulty establishing friendships during a trimester.
 27. Students find difficulty in adjusting to the trimester program when they transfer in from another high school.
-
-

Two types of transferring appear to be involved in this factor; transfer in from junior high school at the beginning of a trimester and transfer in from another high school during high school education. All students have experienced the transfer from junior high to high school and therefore are qualified to give an opinion on the adjustment

problems involved. Analysis of the student data revealed that a second, smaller group had the experience of transferring from one high school to another. In a society where there is considerable geographical mobility, it is probable that a number of students have experienced transferring from one school to another at some time or another. This number is likely to be sufficient to provide all students with relevant information to enable even those who have not made inter-school transfer to imagine the adjustment problems involved.

2.25 Factor Five: Work Load

TABLE 33

FACTOR LOADINGS ON ITEMS CHOSEN FOR INCLUSION IN FACTOR FIVE
(N = 758)

ITEM NUMBER	FACTORS					
	1	2	3	4	5	6
16	-0.088	0.122	-0.084	0.060	<u>0.679</u>	0.109
20	-0.010	0.065	-0.021	0.095	<u>0.718</u>	-0.168

TABLE 34

LIST OF STATEMENTS ASSOCIATED WITH FACTOR FIVE

- | | |
|-----|---|
| 16. | Students have too much homework in Lindsay Thurber. |
| 20. | Tests are given too frequently at Lindsay Thurber. |

Description of Factor Five

Work Load: Table 33 contains the items that meet the criteria related to Factor Five. These two statements ask for the student opinion on the quantity of homework and the frequency of testing given under the trimester system. They elicit student opinion on the amount of school work demanded by teachers outside normal class hours and the emphasis given to examinations by teachers.

Work load is likely to be a matter of concern to students in any school year organization. In a trimester system, however, courses normally taking ten months to complete are condensed into three months. Students take a reduced number of courses so the work load should not be any greater than in a ten-month school year. The reduced time over which trimester courses are spread may affect students' perception.

2.26 Factor Six: Opportunity for Change

TABLE 35

FACTOR LOADINGS ON ITEMS CHOSEN FOR INCLUSION IN FACTOR SIX

(N = 758)

ITEM NUMBERS	FACTORS					
	1	2	3	4	5	6
3	0.130	-0.105	0.053	-0.078	-0.005	<u>0.734</u>
5	0.248	-0.197	0.065	-0.140	0.027	<u>0.657</u>

TABLE 36

LIST OF STATEMENTS ASSOCIATED WITH FACTOR SIX

- | | |
|----|---|
| 3. | Students appreciate the opportunity to change teachers at the end of a trimester. |
| 5. | Students like the opportunity to change courses at the end of a trimester. |

Description of Factor Six

Opportunity for Change: Table 35 contains the items which meet the criteria related to Factor Six. They seek to measure whether students appreciate the opportunity to change teachers at the end of each trimester. They also seek to measure whether students like the opportunity to change courses at the end of each trimester.

One of the most obvious differences between trimester and the ten-month school year organization is the opportunity for change. At the end of each trimester students may change their courses, their teachers, their classrooms and often their classmates. This wide variety of change is likely to have an effect on students' perception of their school year organization. Factor Six appears to encompass at least change of teacher and change of course.

Summary of Factors According to Analysis

Summaries of the composition of the factors are provided in Tables 37, 38, 39 and 40. Mean item scores for each group of respondents are included and the average scores on the factor are reported. Where necessary item scores have been reflected to ensure that a low score indicates an opinion favourable to the school year organization under review. For the purpose of this study the following item scores have been reflected; 2, 4, 6, 10, 11, 12, 13, 14, 16, 17, 20, 27, and 28.

TABLE 37

LINDSAY THURBER STUDENT MEAN SCORES ON ITEMS GROUPED
ACCORDING TO THE DEFINED FACTORS

(N = 758)

FACTORS		QUESTIONNAIRE ITEMS	MEAN SCORES
1. <u>Learning</u> <u>Climate</u>	1	Short term goals motivate	2.15
	8	The long class period	2.41
	9	Variety of teaching technique	2.03
	18	Student attendance	2.30
	24	Review of previous work	2.46
	30	School spirit	3.10
	31	Planning own program	1.97
	32	Better achievement	2.39
			$\bar{X} = 2.35$
2. <u>Pace of</u> <u>Instruction</u>	2	Students performance relative to length of learning	2.27
	6	Depth of learning	2.85
	10	Retardation due to absence	3.71
	11	Time lapse between courses	3.33
	13	Student retention of knowledge	2.59
	14	Pace of instruction	2.82
	17	Fear of failure	2.81
			$\bar{X} = 2.91$
3. <u>Teacher</u> <u>Student</u> <u>Relationship</u>	4	Time too short to know a teacher	2.45
	22	Students know teachers	2.60
	23	Teachers know students	2.97
			$\bar{X} = 2.67$
4. <u>Student</u> <u>Adjustment</u>	7	Transferring in	2.78
	12	Adjustment after transferring in from junior high school	2.37
	26	Establishing friendships	2.36
	27	Adjusting after transferring from another high school	3.08
			$\bar{X} = 2.65$
5. <u>Work</u> <u>Load</u>	16	Homework	2.69
	20	Frequency of testing	2.68
			$\bar{X} = 2.69$
6. <u>Opportunity</u> <u>for Change</u>	3	Opportunity to change teachers	1.70
	5	Opportunity to change courses	1.57
			$\bar{X} = 1.64$

TABLE 38

LINDSAY THURBER TEACHER MEAN SCORES ON ITEMS GROUPED
 ACCORDING TO THE DEFINED FACTORS
 (N = 68)

FACTORS	QUESTIONNAIRE ITEMS		MEAN SCORES
1. <u>Learning</u>	1	Short term goals motivate	2.34
	8	The long class period	2.71
<u>Climate</u>	9	Variety of teaching technique	2.09
	18	Student attendance	2.49
	24	Review of previous work	2.35
	30	School spirit	3.60
	31	Planning own program	2.26
	32	Better achievement	2.81
		$\bar{X} =$	2.58
2. <u>Pace of</u>	2	Student performance relative to length of course	3.16
<u>Instruction</u>	6	Depth of learning	2.75
	10	Retardation due to absence	4.04
	11	Time lapse between courses	3.31
	13	Student retention of knowledge	2.82
	14	Pace of instruction	2.97
	17	Fear of failure	2.10
		$\bar{X} =$	3.02
3. <u>Teacher</u>	4	Time too short to know a teacher	2.96
<u>Student</u>	22	Students know teachers	2.88
<u>Relationships</u>	23	Teachers know students	2.93
		$\bar{X} =$	2.92
4. <u>Student</u>	7	Transferring in	3.46
	12	Adjusting after transfer in from junior high school	3.04
<u>Adjustment</u>	26	Establishing friendships	2.96
	27	Adjusting after transferring from another high school	3.34
		$\bar{X} =$	3.20
5. <u>Work Load</u>	16	Homework	1.93
	20	Frequency of testing	2.49
		$\bar{X} =$	2.21
6. <u>Opportunity</u>	3	Opportunity to change teachers	1.82
<u>for Change</u>	5	Opportunity to change courses	1.78
		$\bar{X} =$	1.80

TABLE 39

JASPER PLACE STUDENT MEAN SCORES ON ITEMS GROUPED
ACCORDING TO THE DEFINED FACTORS

(N = 212)

FACTORS		QUESTIONNAIRE ITEMS	MEAN SCORES
1. <u>Learning</u> <u>Climate</u>	1	Short term goals motivate	2.29
	8	The long class period	2.63
	9	Variety of teaching technique	2.23
	18	Student attendance	2.67
	24	Review of previous work	2.40
	30	School spirit	3.05
	31	Planning own program	1.97
	32	Better achievement	2.34
			$\bar{X} = 2.45$
2. <u>Pace of</u> <u>Instruction</u>	2	Student performance relative to length of course	2.12
	6	Depth of learning	2.97
	10	Retardation due to absence	3.47
	11	Time lapse between courses	3.41
	13	Student retention of knowledge	2.69
	14	Pace of instruction	2.75
	17	Fear of failure	3.25
			$\bar{X} = 2.95$
3. <u>Teacher</u> <u>Student</u> <u>Relationship</u>	4	Time too short to know a teacher	2.10
	22	Students know teachers	2.47
	23	Teachers know students	2.77
			$\bar{X} = 2.45$
4. <u>Student</u> <u>Adjustment</u>	7	Transferring in	2.87
	12	Adjusting after transferring in from junior high	2.34
	26	Establishing friendships	2.15
	27	Adjusting after transferring from another high school	2.76
			$\bar{X} = 2.53$
5. <u>Work Load</u>	16	Homework	2.98
	20	Frequency of testing	2.92
			$\bar{X} = 2.95$
6. <u>Opportunity</u> <u>for change</u>	3	Opportunity to change teachers	1.67
	5	Opportunity to change courses	1.65
			$\bar{X} = 1.66$

TABLE 40

JASPER PLACE TEACHER MEAN SCORES ON ITEMS GROUPED
ACCORDING TO THE DEFINED FACTORS

(N = 78)

FACTORS		QUESTIONNAIRE ITEMS	MEAN SCORES
1. <u>Learning</u>	1	Short term goals motivate	2.64
	8	The long class period	2.69
<u>Climate</u>	9	Variety of teaching technique	2.00
	18	Student attendance	2.83
	24	Review of previous work	2.59
	30	School spirit	3.19
	31	Planning own program	2.29
	32	Better achievement	2.85
		$\bar{X} =$	2.64
2. <u>Pace of</u>	2	Student performance relative	
		to length of course	2.69
<u>Instruction</u>	6	Depth of learning	2.26
	10	Retardation due to absence	3.87
	11	Time lapse between courses	3.08
	13	Student retention of knowledge	2.74
	14	Pace of instruction	2.56
	17	Fear of failure	2.45
		$\bar{X} =$	2.81
3. <u>Teacher</u>	4	Time too short to know a teacher	2.45
<u>Student</u>	22	Students know teachers	2.65
<u>Relationship</u>	23	Teachers know students	2.78
		$\bar{X} =$	2.63
4. <u>Student</u>	7	Transferring in	3.51
	12	Adjusting after transfer in from	
<u>Adjustment</u>		junior high school	2.63
	26	Establishing friendships	2.42
	27	Adjusting after transfer in from	
		another high school	2.64
		$\bar{X} =$	2.80
5. <u>Work Load</u>	16	Homework	1.87
	20	Frequency of testing	2.17
		$\bar{X} =$	2.02
6. <u>Opportunity</u>	3	Opportunity to change teachers	2.15
	5	Opportunity to change courses	2.08
<u>for Change</u>		$\bar{X} =$	2.12

3. ANALYSIS OF RESPONSES MADE BY TRIMESTER STUDENTS FROM LINDSAY THURBER COMPREHENSIVE HIGH SCHOOL

3.1 Overview

To commence the in-depth analysis of this data, average scores for all the factors have been computed and are reported in Table 41. This provides an overview of trimester student opinion towards the trimester system on the six factors.

TABLE 41

TRIMESTER STUDENT AVERAGE SCORES ON EACH FACTOR
(N = 758)

FACTOR		AVERAGE SCORE	DIRECTION OF OPINION
One:	Learning Climate	2.35	Favourable
Two:	Pace of Instruction	2.91	Divided
Three:	Teacher Student Relationship	2.67	Favourable
Four:	Student Adjustment at High School	2.65	Favourable
Five:	Work Load	2.69	Favourable
Six:	Opportunity for Change	1.64	Strongly Favourable

N.B. When examining Table 41 the reader should note the set of conventions outlined on Page 102.

3.11 Conventions for Converting Numerical Scores Into Verbal Counterparts

For the purpose of this study the mean scores, of the respondent groups, on items and factors used in the data analysis are assigned verbal descriptions according to the following classifications:

<u>Range in Numerical Score</u>	<u>Verbal Counterparts</u>
1.00 - 1.99	agree strongly <u>or</u> strongly favourable;
2.00 - 2.89	agree <u>or</u> favourable;
2.90 - 3.09	divided
3.10 - 3.99	disagree <u>or</u> unfavourable;
4.00 - 5.00	disagree strongly <u>or</u> strongly unfavourable;

When factor mean scores are being referred to, the terms "strongly favourable," "favourable," etc. are used. In the case of item mean scores, the terms "agree strongly," "agree," etc. are used.

In order to eliminate repetition of the word perception, the word opinion is used interchangeably throughout the thesis, and should be understood in this context as meaning the same thing.

Student responses were classified according to nominal data items such as grade or sex of student. Within each classification data were clustered according to the partitions listed in Table 22, for example Grade X, Grade XI and Grade XII. Comparisons between these clusters were made using cluster mean scores on each item and the average score on the factor. Table 42 lists items on which student opinion on a factor differed according to these clusters. For instance, on Items 24 and 30 which were part of Learning Climate student opinion varied according to their grade level.

TABLE 42

ITEMS WITHIN THE FACTORS ON WHICH TRIMESTER STUDENTS DIFFERED
ACCORDING TO THE NOMINAL DATA

(N = 758)

GROUPS	FACTORS					
	ONE	TWO	THREE	FOUR	FIVE	SIX
Grade Level	Item 24 Item 30	Item 17		Item 27	Item 20	
Sex	Item 24 Item 31 Av.Score	Item 10 Item 11 Item 14 Item 17 Av.Score	Item 4 Item 22 Item 23 Av.Score	Item 7 Item 27 Av.Score		
Years in School	Item 24 Item 30	Item 17			Item 20 Av.Score	
Number of Courses	Item 8 Av.Score	Item 13	Item 22			
Post High School Plans		Item 2 Item 6 Item 10		Item 26 Item 27		

Later in the text, the analysis of student responses for each factor are given in detail by item and on average score for each factor. The significant findings listed in Table 42 are also analysed by item and the average score on the factor.

To facilitate comprehension and to ensure consistency when reporting student opinion, some items were reflected. Thus the lower the score the more favourable an opinion is presumed to be to the trimester system and conversely the higher the score the less favourable an opinion of the trimester system is presumed to be.

3.2 Factor One: Learning Climate

An average score on Factor One of 2.35 recorded in Table 43 indicates that trimester students held a favourable opinion towards the trimester system on Learning Climate. The students' mean score of 1.97 on Item 31 reveals that students agreed strongly with the suggestion that the trimester system offered them the opportunity to plan their own program. Low scores on Items 1 and 32 indicate that students believed the trimester system motivated them to work harder and also resulted in better student achievement.

Mean scores of 2.41 and 2.03 on Items 8 and 9 respectively demonstrate a student belief that the long period provided more time for variety in classroom activity and helped them achieve greater understanding. It must be remembered that these statements asked the students for a general response. No opportunity existed for them to indicate whether variety in classroom activities did occur; neither were they able to be specific about "understanding"

nor discriminate between various types of learning.

It is interesting to note that the only "unfavourable" response signified by trimester students was on Item 30 where the mean score of 3.10 and a standard deviation of 1.05 shows that they were almost evenly divided as to whether or not the trimester system aids in the development of a good school spirit.

TABLE 43

TRIMESTER STUDENT MEAN RESPONSES ON FACTOR ONE

(N = 758)

ITEM	VARIANCE	S. DEV.	MEAN
1	0.92	0.96	2.15
8	1.21	1.10	2.41
9	1.06	1.03	2.03
18	1.18	1.09	2.30
24	1.11	1.05	2.46
30	1.10	1.05	3.10
31	1.03	1.02	1.97
32	1.05	1.02	2.39
Average score on the factor			- 2.35

3.21 Student Grade Level

Comparison of the average score on Factor One for the three grade level groups, Grade X, XI, XII and recorded in Table 44 revealed no significant differences. Investigation of Item 24, however, which

asks for an opinion as to whether teachers review previous work before going on to new work, shows a significant difference between student mean scores for Grade X and XII and Grade XI and XII. This indicates that Grade XII students agreed with Item 24 more strongly than either Grade X or Grade XI students.

TABLE 44

FACTOR ONE ITEMS ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR GRADE LEVEL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFÉ	PROB.
24	Grade X	302	0.99	0.99	2.62] p < 0.05] p < 0.05	
	Grade XI	197	1.28	1.13	2.52		
	Grade XII	248	1.00	1.00	2.24		
30	Grade X	302	1.08	1.04	2.80] p < 0.05] p < 0.05	
	Grade XI	197	0.97	0.98	3.22		
	Grade XII	248	1.03	1.02	3.34		

Item 30, which asked for an opinion as to whether the trimester system aids in the development of a good school spirit, elicited an interesting variety of responses. Students in Grade X agreed "somewhat" with the statement but their mean response was only 2.80. Students in Grade XI tended to "disagree somewhat" with this statement and recorded a mean response of 3.22. Students in Grade XII were a little stronger in their mean response of 3.34 in the "disagree somewhat" classification. This indicated that Grade XI and XII

students were not sure that the trimester system aided in the development of a good school spirit.

3.22 Comparison of Male and Female Responses on Factor One

A comparison of male and female responses listed in Table 45 indicates that the average score on Factor One for males is lower than for females. The statistically significant difference indicates that although both groups held a favourable opinion of the trimester system on this factor, female student opinion tended to be less favourable. This general trend also applied to the individual items, although statistically significant differences were found on only two of the eight items.

TABLE 45

FACTOR ONE ITEMS ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR SEX

(N = 756)

ITEM	FEMALES (n=434)	\bar{X}_1	MALES (n=322)	\bar{X}_2	S.DEV. ₁	S.DEV. ₂	P = TWO TAIL
24	2.56		2.33		1.08	0.99	p <0.05
31	2.04		1.86		1.04	0.94	p <0.05
Av. Score on Factor	2.43		2.30		0.63	0.61	p <0.05

An analysis of Item 24 shows that the mean responses of the two groups differ significantly. In this case male students perceived teachers as more prepared to review previous work at the beginning of a trimester than females. It seems unlikely that teachers would

discriminate between males and females when reviewing previous work; therefore, the difference was one of perception. Male students also indicated on Item 31 that they agreed more strongly than females with the suggestion that the trimester system provided students with the opportunity to plan their own program.

3.23 Number of Years Students Had Spent at Their School

To ascertain whether student opinion about the trimester system was related to the number of years they had been associated with it, responses were classified into four subgroups according to students who had been in the system for one, two, three and four years. Comparisons of the average scores on the factor for the four subgroups revealed no significant differences. When the perceptions, on Item 24, of students who had spent three years in the system were compared with the perceptions of students in their first year at Lindsay Thurber Comprehensive High School an interesting finding occurred. The third year students were more likely to perceive the teachers as spending extra time reviewing work before going on to new work than the first year students. This was a puzzling finding and could be explained by the fact that first year students had recently come from a junior high school. There, they were not required to take the same level of responsibility for their own education as they were at high school. It may also be that as the school work became more complex, teachers felt students needed greater help in this regard.

On Item 30, which concerned student opinion about school spirit,

there was a significant difference in the mean opinion of students who had been in the school for one or two years, and for one or three years. Examination of the means reveals that first year students tended to "agree somewhat" with the statement that the trimester system aids in the development of a good school spirit while students who

TABLE 46

FACTOR ONE ITEMS ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THE YEARS THEY HAD SPENT AT THEIR SCHOOL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
24	One year	322	1.05	1.02	2.64	p < 0.05
	Two years	212	1.23	1.11	2.45	
	Three years	205	1.02	1.01	2.22	
	More than Three years	10	0.90	0.95	2.70	
30	One year	322	1.01	1.00	2.79	p < 0.05
	Two years	212	0.98	0.99	3.24	
	Three years	205	1.06	1.03	3.41	p < 0.05
	More than Three years	10	1.79	1.34	2.70	

had been at Lindsay Thurber Comprehensive High School for two or three years tended to "disagree somewhat" with the suggestion.

3.24 Number of Courses Students were Taking in a Trimester

An Anova revealed that when student scores were clustered according to the number of courses they were taking their average scores

on the factor differed significantly. A Scheffé Multiple Comparison of Means Test indicated that the average scores on Factor One, for subgroups three and four differed significantly showing that students taking four courses held a more favourable opinion of the trimester system than those students taking three courses. Four courses was above the average or "suggested" course load for a trimester. This finding is comparable to that of Mertes (1969) cited in the literature review of this study.

TABLE 47

A FACTOR ONE ITEM ON WHICH TRIMESTER STUDENTS DIFFERED SIGNIFICANTLY ACCORDING TO THE NUMBER OF COURSES THEY WERE TAKING

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
8	One course	96	1.13	1.06	2.32	
	Two courses	253	1.29	1.14	2.48	] — p < 0.05] — p < 0.05
	Three courses	348	1.21	1.10	2.47	
	More than Three courses	60	0.83	0.91	1.98	
<hr/>						
Av. Score on Factor.						
	One course	96	0.29	0.54	2.34	
	Two courses	253	0.38	0.62	2.40	
	Three courses	348	0.45	0.67	2.42	] — p < 0.05
	More than Three courses	60	0.30	0.55	2.14	

Mertes (1969), studying students who had changed from working in a semester system to a quarter system, found an increase in the numbers

who were awarded A grades and F grades. It may be that the academically motivated are more successful in the compacted school year organization. If students taking four courses are likely to be more academically motivated than students taking three or fewer courses, this may explain their more favourable opinion of the trimester. This may also explain the statistically significant difference on Item 8 between students taking two courses and students taking more than three. Item 8 refers to the longer class period used in the trimester system, and contains the inference that this helps students to achieve greater understanding. Students taking more than three courses agreed with this statement more strongly than did students taking two or three courses. The explanation may be that intellectually capable students would be taking more than three courses and would have less difficulty in concentrating for the two-hour period than less capable students. These less capable students would be expected to take two or three courses.

3.25 Students' Post High School Plans

When student mean responses from subgroups according to their post high school plans were compared, no significant differences were noted.

3.3 Factor Two: Pace of Instruction

On the factor Pace of Instruction students showed by their average score on the factor, which is recorded in Table 48, that they tended to be divided in their opinion towards the trimester system. They recorded their lowest score on Item 2 (a reflected score) suggesting that two terms rather than three would help students perform better. This seems to indicate a rejection of the longer school term. Students recorded their most most "unfavourable" score on Items 10 and 11,

indicating student concern with the retardation caused by missing a few classes and the retention problem associated with the lapse of time between sequential courses. This is an interesting finding because there is some evidence, cited in the literature review of this study, indicating that the degree of forgetting between sequential courses in a compacted school year is insufficient to justify extensive review of previous work before commencing new work.

TABLE 48

TRIMESTER STUDENT MEAN RESPONSES ON FACTOR TWO

(N = 758)

ITEM	VARIANCE	S. DEV.	MEAN
2	1.48	1.22	2.27
6	1.38	1.17	2.85
10	1.45	1.20	3.71
11	1.28	1.13	3.33
13	1.39	1.18	2.59
14	1.37	1.17	2.82
17	1.71	1.31	2.81
Average score on the factor			2.91

All items have been reflected.

3.31 Student Grade Level

When students were divided into subgroups according to the grade level in which they did most of their work, the average scores on Factor Two did not differ significantly. On Item 17 (a reflected score) which suggests that students fear failure more in a one trimester course than courses spread over more than one trimester, the three grade levels differed.

Examination of Item 17 in Table 49 indicates that Grade X students tended to be divided in their opinion as to whether they feared failure more in a one trimester course than in a course spread over more than one trimester. Students in Grade XI and Grade XII, however, differed significantly from this view and both disagreed with the item. This indicates that in the senior grades students tended to be less concerned with fear of failure in the trimester system.

TABLE 49

A FACTOR TWO ITEM ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR GRADE LEVEL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
17	Grade X	302	1.72	1.31	3.07	]—p <0.05]—p <0.05
	Grade XI	197	1.70	1.30	2.73	
	Grade XII	248	1.59	1.26	2.56	

3.32 Comparison of Male and Female Student Responses

Analysis of the data in Table 50 reveals that female students recorded an average score on the factor of 2.99 which indicates that they were divided in their opinion on this factor. While not varying greatly from this, the opinion male students recorded was significantly different and more favourable to the trimester system.

On Items 10 and 11 both sexes indicated agreement with the suggestion that missing a few classes in a trimester really sets a student

back in his or her progress and the lapse of time between sequential courses is too long. Item scores have been reflected so it can be seen that females were more likely to agree that the trimester system had these negative characteristics than males.

TABLE 50
FACTOR TWO ITEMS ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR SEX
(N = 756)

ITEM	FEMALES \bar{X}_1 n = 434	MALES \bar{X}_2 n = 322	S. DEV. ₁	S. DEV. ₂	P - TWO TAIL
10	3.83	3.54	1.18	1.23	p < 0.05
11	3.47	3.13	1.12	1.12	p < 0.05
14	2.93	2.68	1.20	1.11	p < 0.05
17	2.94	2.67	1.32	1.28	p < 0.05
Av. Score on factor	2.99	2.80	0.77	0.72	p < 0.05

Item scores have been reflected.

Analysis of Item 14 shows that sex of the student was related to student opinion on the suggestion that the pace of instruction in a one trimester course was too fast. The item score has been reflected; hence, a score of 2.68 indicates that male students disagreed with this suggestion more strongly than females. The same type of reasoning can be applied to Item 17. It should be noted that the differences on all items are statistically significant, which suggests that male

students had a more favourable opinion of the pace of instruction in the trimester system than female students. An explanation of this phenomenon may be that male students were more interested than female students in the possibility of accelerating their progress and graduating early. To a limited degree this conjecture was supported by the fact that three out of every four of the sixty students taking more than three courses were males.

3.33 The Number of Years Students Had Spent at Their School

TABLE 51

A FACTOR TWO ITEM ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THE YEARS THEY HAD SPENT AT THEIR SCHOOL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
17	One year	322	1.70	1.30	3.05	] - p < 0.05
	Two years	212	1.68	1.30	2.72	
	Three years	205	1.61	1.27	2.52	] - p < 0.05
	More than Three years	10	2.10	1.45	2.90	

A comparison of the average score on the factor for students, according to the number of years they had spent in their school, failed to indicate any significant differences. Significant differences did occur on Item 17. The means listed in Table 51 indicate that students who had been in the school for three years tended to disagree with the suggestion, that they feared failure more in a one trimester course than in a course spread over more than one trimester, more strongly than other students.

3.34 The Number of Courses Students Were Taking in a Trimester

When student mean scores were clustered according to the number of courses students were taking in one trimester no significant differences were found on the average score on the factor for Factor Two. Differences between the student mean scores occurred on Item 13 and these are recorded in Table 52. Item 13 (a reflected score) suggests that student retention is less when students cover a course in one trimester instead of in a longer period of time.

TABLE 52

A FACTOR TWO ITEM ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THE NUMBER OF COURSES THEY WERE TAKING

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
13	One course	96	0.97	0.99	2.22] --p <0.05] --p <0.05
	Two courses	253	1.49	1.22	2.62	
	Three courses	348	1.45	1.20	2.67	
	More than Three courses	60	1.17	1.08	2.57	

Examination of Table 52 reveals that the mean score of students taking one course differed significantly from the mean score of students taking two or three courses. Students taking one course disagreed more strongly with the item than students taking two or three courses.

3.35 Students' Post High School Plans

There were no significant differences between the average scores on the factor for students when they were grouped according to their post high school plans. Table 53 reveals that there were, however,

significant differences on Items 2, 6 and 10. On Item 2, which suggests that two terms during the year rather than three would help students to perform better, the only students to differ significantly were the students planning to go to university and those planning to go to an institute of technology. Students planning to go to an institute disagreed more strongly with the statement than other students.

TABLE 53

FACTOR TWO ITEMS ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR POST HIGH SCHOOL PLANS

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
2	Institute	103	1.03	1.01	1.97]— p <0.05
	University	247	1.67	1.29	2.41	
	Work	203	1.45	1.21	2.27	
	Other	205	1.45	1.21	2.25	
6	Institute	103	1.20	1.10	2.95]— p <0.05
	University	247	1.45	1.20	2.66	
	Work	203	1.15	1.07	2.97	
	Other	205	1.56	1.25	2.90	
10	Institute	103	1.62	1.27	3.58]— p <0.05
	University	247	1.26	1.12	3.89	
	Work	203	1.41	1.19	3.53	
	Other	205	1.58	1.26	3.73	

The students planning to go to university differed significantly from the group planning to go to work when they responded to Item 6. This item suggests that learning in the trimester system was superficial. University aspirants tended to disagree with this suggestion but students planning to work were divided in their response.

These same two groups differed in their response to Item 10, which suggests that missing a few classes during a trimester really sets a student back in his progress. This is a reflected score so the data indicate that students planning to go to university agreed with the item more strongly than the students planning to go to work.

3.4 Factor Three: Teacher Student Relationships

The average score on Factor Three indicates that students believed that the trimester system provided time for the establishment of "Teacher Student Relationships". The favourable score of 2.45 (a reflected score) on Item 4 indicates that the majority of students

TABLE 54
TRIMESTER STUDENT MEAN RESPONSES ON FACTOR THREE
(N = 758)

ITEM	VARIANCE	S. DEV.	MEAN
4	1.49	1.22	2.45
22	1.11	1.05	2.60
23	1.22	1.10	2.97
Average score on the factor.			2.67

rejected the suggestion that one trimester is too short a time to get to know a teacher. Item 22 has a mean score of 2.60, recorded in Table 54 which indicates that students believed they got to know their teachers "quite well". However, on Item 23, which suggests that teachers get to know their students "quite well", students tended to be divided in their response.

3.41 Comparison of Male and Female Student Responses

On Factor Three sex of the students appears to have a significant relationship with their opinion. Although both groups tended towards support for the proposition that the trimester system provided sufficient time for the establishment of teacher student relationships, the average score on the factor for males is lower, signifying a greater degree of support for the trimester system on this factor than females.

TABLE 55

A FACTOR THREE ITEM ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR SEX

ITEM	FEMALES \bar{X}_1 n = 434	MALES \bar{X}_2 n = 322	S. DEV. ₁	S. DEV. ₂	P TWO TAIL
4	2.51	2.34	1.17	1.08	p < 0.05
22	2.68	2.46	1.07	1.01	p < 0.05
23	3.04	2.84	1.11	1.08	p < 0.05
Av. Score on factor	2.63	2.47	0.91	0.83	p < 0.05

A similar observation holds for Item 22 and Item 23. Males tended to believe that they "got to know teachers" and teachers "got to know them". Females, however, although supportive, held a less favourable opinion towards the suggestion that they "got to know teachers" and on the statement that teachers "got to know students", they were divided.

3.42 The Number of Courses Students were Taking in a Term

There is no significant difference between the average scores on Factor Three for these students; however, a difference between means on Item 22 occurs and is recorded in Table 56. Students taking only one

course and those taking more than three appear to have held a more favourable opinion towards the trimester system on this dimension than did students working on two and three courses. A statistically significant difference, however, occurred only between the scores of students taking one course and those taking two courses.

TABLE 56

A FACTOR THREE ITEM ON WHICH TRIMESTER STUDENTS DIFFERED SIGNIFICANTLY ACCORDING TO THE NUMBER OF COURSES THEY WERE TAKING

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
22	One course	96	0.91	0.95	2.30] - p < 0.05
	Two courses	253	1.21	1.10	2.71	
	Three courses	348	1.12	1.06	2.63	
	More than Three courses	60	0.85	0.92	2.40	

3.43 Remaining Nominal Data Items

Further analysis of the data revealed that the variables of grade level, years in their school and post high school plans were not significantly related to student opinion on this factor, nor on any items within the factor.

3.5 Factor Four: Student Adjustment at High School

On the factor "Student Adjustment at High School" trimester students recorded an average score of 2.65 (Table 57) which indicates agreement with items suggesting that students did not have difficulty adjusting to the trimester system. The students registered their highest agreement score on the suggestion that students had hardly any problems

when transferring in from junior high school (Item 7). The majority of students indicated that they had little difficulty in establishing friendships during a trimester as indicated by a mean score of 2.36 on Item 26. On Item 27, which addresses the problem of adjustment experienced by a student who transfers in from another high school, trimester students were divided in their opinion.

TABLE 57

TRIMESTER STUDENT MEAN RESPONSES ON FACTOR FOUR

(N = 758)

ITEM	VARIANCE	S. DEV.	MEAN
7	0.92	0.96	2.78
12	1.46	1.21	2.37
26	1.26	1.12	2.36
27	1.11	1.06	3.08
Average score on the factor			2.65

3.51 Student Grade Level

On Factor Four there was no significant difference between the average score on the factor for each group. There was one significant grade level difference on Item 27, however, and as might be expected Grade X students, few of whom were likely to have transferred in from another high school tended to be divided, while Grade XI students tended to agree that transfer-ins would have difficulties.

TABLE 58

A FACTOR FOUR ITEM ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR GRADE LEVEL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
27	Grade X	302	1.02	1.01	2.93	] — p < 0.05
	Grade XI	197	1.01	1.00	3.28	
	Grade XII	248	1.23	1.11	3.11	

The scores contained in Table 58 have been reflected.

3.52 Comparison of Male and Female Student Responses

Comparison of the average score on the factor for male students with that of female students, reported in Table 59, indicates that males agreed more strongly than females to the suggestion that students have few difficulties when transferring into the trimester system.

TABLE 59

FACTOR FOUR ITEMS ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR SEX

(N = 756)

ITEM	FEMALES n 434	\bar{X}_1	MALES n 322	\bar{X}_2	S.DEV. ₁	S.DEV. ₂	P = TWO TAIL
7	2.88		2.63		1.23	1.29	p < 0.05
27	3.18		2.96		1.08	1.01	p < 0.05
Av. Score on factor	2.70		2.55		0.80	0.80	p < 0.05

Item 7 is concerned with transferring in from junior high school and Item 27 with transferring in from another high school. Females were slightly less supportive of the trimester system with regard to problems of adjustment than were males; both groups, however, lean to the "favourable" side in this respect.

3.53 Students Post High School Plans

An examination of Table 60 reveals that on Item 26, which suggests that students have no difficulty establishing friendships during a trimester, students planning to attend an institute of technology tended to record lower scores than students who planned to go elsewhere. A significant difference occurred between the scores of students planning to attend an institute and students indicating their post high school plans as "other".

TABLE 60

FACTOR FOUR ITEMS ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR POST HIGH SCHOOL PLANS

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
26	Institute	103	0.91	0.95	2.15] p < 0.05
	University	247	1.32	1.15	2.34	
	Work	203	1.22	1.11	2.29	
	Other	205	1.35	1.16	2.57	
27	Institute	103	1.09	1.04	3.10] p < 0.05
	University	247	1.09	1.04	3.22	
	Work	203	1.02	1.01	2.93	
	Other	205	1.21	1.10	3.07	

On Item 27, (Table 60) which suggests that students have difficulty in adjusting to the trimester program, the scores of students planning to attend a university differed significantly from those planning to go to work. These scores have been reflected; hence, a score of 3.22 indicates that students planning to attend a university tended to agree with the item.

3.54 Remaining Nominal Data Items

Further analysis of the data revealed that the variables, years spent in their school and number of courses taken in a trimester were not significantly related to student opinion on this factor nor on the individual items.

3.6 Factor Five: Work Load

An average score on this factor of 2.69 demonstrates that the majority of students did not believe that the students at Lindsay Thurber experienced an excessive work load.

TABLE 61

TRIMESTER STUDENT MEAN SCORES ON FACTOR FIVE

(N = 758)

ITEM	VARIANCE	S. DEV.	MEAN
16	1.38	1.18	2.69
20	1.06	1.03	2.68
Average score on the factor			2.69

The findings on Item 20 reported in Table 61 tend to indicate that the majority of students did not feel that testing was excessive. This finding may be related to the finding that Lindsay Thurber students

tended not to fear failure in courses spread over one trimester.

3.61 Student Grade Level

A comparison of the average score on Factor Five for each grade revealed no statistically significant differences. There was, however, a significant difference between the mean opinion of Grade X students and that of Grade XII students on Item 20. This may indicate that the Grade XII students were better able to cope with the pressure generated by frequent testing.

TABLE 62

A FACTOR FIVE ITEM ON WHICH TRIMESTER STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR GRADE LEVEL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
20	Grade X	302	1.11	1.06	2.78	p < 0.05
	Grade XI	197	0.89	0.94	2.76	
	Grade XII	248	1.07	1.03	2.50	

3.62 A Comparison of Male and Female Student Responses

Examination of the average score on this factor of male and female students revealed no significant differences between them. Neither did they differ on individual items.

3.63 The Number of Years Students Had Spent at Their School

A significant difference occurred between the average score on the factor for students who had been in the school one year and those who had been in it three years. This may serve to support the conjecture that the longer students stay in the system the more they come to like

it. Furthermore, analysis of the responses to Item 20 suggests that students who had spent three years in the school were least likely to regard testing as too frequent.

TABLE 63

A FACTOR FIVE ITEM ON WHICH TRIMESTER STUDENTS DIFFERED SIGNIFICANTLY ACCORDING TO THE YEARS THEY HAD SPENT AT THEIR SCHOOL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
20	One year	322	1.12	1.06	2.82] - p <0.05
	Two years	212	0.92	0.96	2.71	
	Three years	205	1.05	1.02	2.41	
	More than	10	1.07	1.03	2.80	
	Three years					
Average Score on Factor						
	One year	322	0.74	0.86	2.86] - p <0.05
	Two years	212	0.60	0.77	2.74	
	Three years	205	0.73	0.85	2.57	
	More than	10	0.97	0.98	2.50	
	Three years					

3.64 The Number of Courses Students Were Taking in a Trimester

When student responses were grouped according to the number of courses they were taking in a term no significant differences were revealed between any groups. This is surprising because it might have been expected that students taking more than the "recommended" number of courses might have had a different perspective on "Work Load" than students only taking one or two courses.

3.65 Remaining Nominal Data Items

Further analysis of the data revealed that the variables of number of courses and post high school plans were not significantly related to

student perception on this factor, nor on any of the items within the factor.

3.7 Factor Six: Opportunity for Change

Table 64 indicates an average score on this factor for trimester students of 1.64 which illustrates that they held a highly favourable opinion of the opportunity for change offered by the trimester system.

TABLE 64
TRIMESTER STUDENT MEAN SCORES ON FACTOR SIX
(N = 758)

ITEM	VARIANCE	S. DEV.	MEAN
3	0.70	0.84	1.70
5	0.51	0.72	1.57
Average score on the factor.			1.64

On Item 3 which suggests that students appreciate the opportunity to change teachers, trimester students indicated a strong agreement score. They also indicated a strong agreement score on Item 5, which suggests that students appreciated the opportunity to change courses.

3.71 Remaining Nominal Data Items

Comparisons of student mean scores when they were classified according to the variables, grade, sex of student, years at the school, number of courses and post high school plans revealed no significant differences between the average scores on the factor or the individual items.

3.8 Summary of Findings for Trimester Students

Trimester students reported a favourable opinion on the factors, Learning Climate, Teacher Student Relationships, Student Adjustment at High School and Work Load. Their response to Pace of Instruction was divided but they reported a strongly favourable opinion on Opportunity for Change.

Further analysis of student responses according to the nominal variables revealed significant differences between the various subgroup scores on certain items. Grade XII students recorded the most favourable responses on Item 17, students fear failure more in a one trimester course than in courses spread over more than one trimester; Item 20, tests are given too frequently at Lindsay Thurber and Item 24, teachers review previous work before going on to new work. On Item 27, students find difficulty in adjusting to the trimester when they transfer in from another high school and Item 30, the trimester aids in the development of a good school spirit, the Grade XII students recorded the least favourable opinion.

Examination of Table 42 revealed that male students reported a score more favourable to the trimester than females on eleven of the thirty-two items and on the average score on the factor for Learning Climate, Pace of Instruction and Teacher Student Relationships.

When student scores were classified according to the number of years they had been at Lindsay Thurber significant differences occurred on four items and the average score on Factor Five, Work Load. The scores of students who had been in the school for three years were more favourable towards the trimester system at Lindsay Thurber on Item 17, students fear failure more in a trimester course than in a course spread over more than

one trimester; Item 20, tests are given too frequently; Item 24, teachers review previous work before going on to new work and Factor Five, Work Load. On Item 30, the trimester aids in the development of a good school spirit, the scores of students who had been in the school three years were the least favourable.

When student scores were classified according to the number of courses in which they were enrolled significant differences occurred on three items and Factor One. Students taking more than three courses reported scores more favourable to the trimester system at Lindsay Thurber than students who were taking two or three courses on several items. These items were Item 8, the longer class period helps students achieve greater understanding; Item 13, students forget more when they cover a course in a trimester instead of in a longer period of time; Item 22, students at Lindsay Thurber get to know their teacher quite well and also on Factor One, Learning Climate.

When student scores were classified according to their post high school plans significant differences occurred on five items. On three of the five, Item 2, two terms rather than three would help students to perform better; Item 10, missing a few classes really sets a student back in his progress and Item 27, students find difficulty in adjusting to the trimester program when they transfer in from another high school, the students planning to go to university recorded the least favourable opinion. No particular pattern emerged from an examination of the other two items.

4. ANALYSIS OF RESPONSES MADE BY TEACHERS WORKING IN THE TRIMESTER SYSTEM

4.1 Overview

An analysis of trimester teacher data has been based on the same clusters of items as located by the factor analysis of the trimester student responses. The average score on the factor has been calculated to indicate teacher opinion on each factor and is listed in Table 65. Individual items within the factors were examined to determine their contribution to the group average score on the factor. Teacher mean responses have been classified into subgroups according to the variables described in Chapter III. To establish the relationship of these variables to teacher opinion the average score on the factor for each subgroup within the variable has been calculated and compared, and a comparison made of the subgroup mean score on individual items. Table 66 contains a record of the items within the factors on which trimester teachers differed according to the nominal data items.

To facilitate data reduction and ensure that item scores indicate a consistent opinion some item scores have been reflected so that all low scores indicate an opinion favourable to the trimester system and all high scores indicate an opinion unfavourable to the trimester system.

The set of conventions outlined on page 102 should be read before Table 65 is examined.

TABLE 65
TRIMESTER TEACHER MEAN SCORES ON EACH FACTOR
(N = 68)

FACTOR		AVERAGE SCORE	DIRECTION OF OPINION
One:	Learning Climate	2.58	Favourable
Two:	Pace of Instruction	3.02	Divided
Three:	Teacher Student Relationships	2.92	Divided
Four:	Student Adjustment at High School	3.20	Unfavourable
Five:	Work Load	2.21	Favourable
Six:	Opportunity for Change	1.80	Strongly Favourable

TABLE 66
FACTOR ITEMS ON WHICH TRIMESTER TEACHERS
DIFFERED ACCORDING TO THE NOMINAL DATA ITEMS

GROUPS	FACTORS					
	ONE	TWO	THREE	FOUR	FIVE	SIX
Teacher Position						
Subjects Taught	All Items	All Items	All Items	All Items	All Items	All Items
Years at Lind. Thurber		Item 6		Item 7		
Years of Teaching Exp				Item 7		
Professional Preparation						

4.2. Factor One: Learning Climate

Examination of Table 67 reveals an average score of 2.58 on the factor which indicates that trimester teachers held a favourable opinion of the learning climate in the trimester system. Their most favourable response was recorded on Item 9 which suggests that the longer class period provides time for more variety in classroom activities. This is an interesting finding because trimester students also recorded a favourable opinion on this statement. Teacher opinion was

TABLE 67

TRIMESTER TEACHER MEAN SCORES ON FACTOR ONE

(N = 68)

ITEM	VARIANCE	S. DEV.	MEAN
1	1.07	1.03	2.34
8	1.43	1.19	2.71
9	1.22	1.10	2.09
18	0.98	0.99	2.49
24	0.65	0.81	2.35
30	0.96	0.98	3.60
31	0.93	0.97	2.26
32	0.96	0.98	2.81
Average score on the factor			2.58

similar to student opinion on the motivating aspect of the trimester, teacher preparedness to review previous work at the beginning of a trimester and their belief that the trimester provided students with the opportunity to plan their own courses. Both groups held favourable opinions towards the trimester on these items.

Like trimester students the trimester teachers recorded their only unfavourable opinion on Item 30 which suggests that the trimester system aids in the development of a good school spirit.

4.21 Trimester Teacher Opinion on Factor One According to the Subjects They Taught: When divided into subgroups according to the subjects they taught, teachers reported a wide range of average scores on the factor. The small numbers involved in Table 68 should be noted with the realization that there is a need for caution when interpreting results. Despite this restriction, however, analysis reveals some interesting findings.

Only teachers of English tended to disagree that the trimester system was supportive of the Learning Climate. They held consistently unfavourable opinions on all items except Item 24. It will be recalled that Item 24 refers to teachers reviewing previous work at the beginning of a trimester. Comments reported by teachers of English to the open ended questions in the questionnaire may go part way to explaining these unfavourable opinions. In these comments, teachers claimed that English courses require a great quantity of reading and the trimester does not contain sufficient evening time between courses to allow students to make a thorough review of the required literature. Mastering English, they continued, was a gradual process requiring a combination of learning and mental maturation which could only be achieved over a more protracted period than that provided during one trimester (Appendix E).

All other teacher subgroups reported an opinion favourable to the trimester system on Factor One. They ranged in degree to which they favoured the system from the teachers of fine arts who tended

TABLE 68

FACTOR ONE ITEMS ON WHICH TRIMESTER TEACHERS
DIFFERED ACCORDING TO THE SUBJECTS THEY TAUGHT
(N = 63)

ITEM	BUSINESS ED. n = 7	ENGLISH n = 10	MATH n = 5	MOD.LANG. n = 4	PHYS.ED. n = 4	SCIENCE n = 9	SOC.ST. n = 8	VOC.ED. n = 11	FINE ARTS n = 5
1	2.14	3.40	1.40	2.25	1.75	2.11	2.00	2.36	2.60
8	2.71	3.80	2.40	3.25	3.50	2.22	2.38	2.09	3.00
9	2.57	3.20	1.40	2.50	1.75	1.67	2.00	1.27	2.60
18	2.57	3.20	2.60	2.25	1.75	2.78	1.88	2.18	2.60
24	2.14	2.30	2.20	2.00	2.50	2.33	2.63	2.09	3.40
30	3.00	4.40	3.80	3.50	4.00	3.89	3.63	3.18	3.20
31	2.14	3.00	2.00	2.25	2.25	2.33	2.00	1.82	3.00
32	2.57	3.70	3.20	2.72	3.00	2.33	2.75	2.36	2.80
Average Score	2.48	3.37	2.37	2.59	2.56	2.46	2.41	2.17	2.90

to be "divided" down to the mathematics and vocational education teachers who were strongly in favour of the trimester system.

An analysis of the individual items provides further insight into teacher perception of the trimester system. Eight out of the nine teacher subgroups agreed with Item 1. This item suggests that the short term of a trimester motivates students to work harder. Teachers of mathematics and physical education reported scores in the "agree strongly" category. On Item 8, which suggests that the longer class period of a trimester helps students achieve greater understanding, five out of the nine subgroups reported scores in the "agree" category but no groups reported scores in the "agree strongly" category.

On Item 9, which suggests that the longer class period provides time for more variety in classroom activities, only the teachers of English held an unfavourable view. Teacher comments to the open ended questions, which are recorded in Appendix E, indicate that they liked the opportunity for extra time in laboratories, workshop and field trips.

4.22 Remaining Nominal Data Items Associated with Factor One

On Factor One the variables of teacher position in the school, the number of years spent at Lindsay Thurber, the years of teaching experience teachers had and the level of their professional preparation had no significant relationship with teacher opinion.

4.3 Factor Two: Pace of Instruction

From an examination of the average score on the factor, revealed in Table 69, it can be seen that trimester teachers tended to be "divided" in their opinion about the pace of instruction provided in the trimester

system at Lindsay Thurber Comprehensive High School. This is a similar overall view to that recorded by trimester students. Some differences between student and teacher opinion did occur. On Item 2, which suggests that two terms during the year rather than three would help students to perform better, the majority of students disagreed while the majority of teachers agreed.

TABLE 69

TRIMESTER TEACHER MEAN SCORES ON FACTOR TWO

(N = 68)

ITEM	VARIANCE	S. DEV.	MEAN
2	1.72	1.31	3.16
6	2.11	1.45	2.75
10	0.88	0.94	4.04
11	1.53	1.24	3.31
13	1.48	1.22	2.82
14	1.29	1.13	2.97
17	0.96	0.98	2.10
Average score on the factor			3.02

All item scores have been reflected.

Teachers held a stronger belief, that missing a few classes caused serious retardation, than the students. Teachers also indicated more strongly than students, that students forgot more when they covered courses in one trimester rather than when courses were spread over more than one trimester. Teachers disagreed more strongly than students with the item suggesting that students fear failure more in one trimester courses than they do for courses spread over more than one trimester.

4.31 Trimester Teacher Opinion on Factor Two According to the Subjects

Taught: Table 70 shows that teachers, when divided into subgroups according to the subjects they taught, displayed a wide range of opinion about the pace of instruction. This contrasts with the students who were almost evenly divided on this issue. Two teacher subgroups, those teaching vocational education and those teaching science, indicated a favourable opinion towards the trimester system. Conversely, the teachers of physical education, fine arts and English recorded an unfavourable opinion. The unfavourable opinion of English teachers can probably be explained by reference to the discussion of Factor One. Physical education teachers recorded a favourable opinion on learning climate but an unfavourable comment on pace of instruction. In answer to the open ended questions, some of the physical education teachers suggested that student physical fitness could not be achieved by a short intensive program followed by a lapse between courses as correct physical development was the result of a continuous program. Complaints were also made that inter-school competition was difficult to arrange because provincial sports' competitions were set up to suit the semester system. Intra-school sporting competitions were difficult to arrange because only one-third of the students were in a physical education program at a time. (Appendix E)

Teachers of fine arts strongly agreed with the suggestion that two terms rather than three would help students perform better. They also indicated a strong belief that students in the trimester system achieved only superficial learning (Item 6).

Four out of the nine subgroups recorded average scores on the factor close to three which indicates that they tended to be divided.

TABLE 70

FACTOR TWO ITEMS ON WHICH TRIMESTER TEACHERS
DIFFERED ACCORDING TO THE SUBJECTS THEY TAUGHT
(N = 63)

ITEM	BUSINESS ED. n = 7	ENGLISH n = 10	MATH n = 5	MOD.LANG. n = 4	PHYS.ED. n = 4	SCIENCE n = 9	SOC.ST. n = 8	VOC.ED. n = 11	FINE ARTS n = 5
2	2.86	4.50	3.20	3.50	3.00	3.00	3.25	2.09	4.00
6	2.43	4.00	2.80	2.50	3.00	2.22	3.00	1.64	4.20
10	4.14	4.30	4.80	4.25	4.50	4.00	3.50	3.64	4.00
11	3.86	4.20	2.60	3.50	4.25	2.67	3.25	2.82	3.60
13	2.71	4.20	2.40	2.75	3.00	2.56	3.12	1.11	3.40
14	2.71	3.80	3.20	3.25	2.75	2.67	2.62	2.73	3.80
17	1.71	2.10	2.00	1.75	3.00	2.00	2.37	1.91	2.60
Average Score	2.92	3.87	3.00	3.07	3.36	2.73	3.02	2.39	3.66

All item scores have been reflected.

their opinion about this factor. On Item 2 five out of the nine subgroups indicated an unfavourable opinion towards the trimester. This item asks for an opinion on whether two terms during the year rather than three would help students to perform better. This suggests that some teachers believed the trimester system helped students to perform better. Five out of nine teacher subgroups disagreed with the suggestion that the trimester system led to superficial learning. These five subgroups plus three others also disagreed with the statement that students in a one trimester course feared failure more than when they were in a course which spread over more than one trimester.

4.32 Trimester Teacher Opinion According to Their Years in the School

TABLE 71

A FACTOR TWO ITEM ON WHICH TRIMESTER TEACHERS DIFFERED
ACCORDING TO THEIR YEARS IN THE SCHOOL
(N = 66)

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
6	0 - 5 yrs	16	2.00	1.41	3.50	p < 0.05
	6 - 9 yrs	29	2.35	1.54	3.00	
	10 - 15 yrs	17	0.98	0.99	2.12	
	More than 15 yrs	4	0.25	0.50	1.25	p < 0.05

From Table 71 it can be seen that teachers who had been in the school 10 or more years held a favourable opinion of the trimester system on pace of instruction. This disagrees sharply with the unfavourable opinion of teachers who had been in the system for from zero to 5 years. This finding may indicate that teachers who had been in the

system for a long time had developed a loyalty to it. It may indicate, however, that the trimester system requires a particular type of teacher. Teachers who are successful in it may stay while those who are not may transfer elsewhere. These teachers who had persisted in the system may have developed techniques to compensate for any difficulties associated with the trimester system.

4.33 Remaining Nominal Data Items Associated with Factor Two

When teachers were divided into subgroups according to their years of teaching experience, their position in the school and their professional preparation, no significant differences were found between the opinions of subgroups on individual items nor between the average scores on the factor.

4.4 Factor Three: Teacher Student Relationships

TABLE 72

TRIMESTER TEACHER MEAN SCORES ON FACTOR THREE

(N = 68)

ITEM	VARIANCE	S. DEV.	MEAN
4	1.74	1.32	2.96
22	1.25	1.14	2.88
23	1.54	1.26	2.93
Average score on the factor			2.92

On the factor, "Teacher Student Relationships", trimester teachers recorded an average score on the factor of 2.92 which is in the "divided" category. This differed from the views of the trimester students, the majority of whom held a "favourable" opinion of

the teacher student relationships. On Item 4, which states one trimester is too short a time to get to know a teacher, scores have been reflected. Students tended to agree with the item but teacher scores, recorded in Table 72, tended to be in the "divided" category. Teachers and students also differed on Item 22, which states that students at this school get to know their teachers quite well. Although both groups held favourable opinions towards the trimester system on this item students held a more favourable opinion.

4.41 Trimester Teacher Opinion on Factor Three According to the Subjects Taught: A comparison of the average scores shown in Table 73 on this factor indicates that only three subgroups, the teachers of business education, science and vocational education, held a favourable opinion towards the teacher student relationships in the trimester system. However, teachers of English, mathematics, modern languages, social studies and fine arts tended to disagree with the view that the trimester system promotes teacher student relationships.

Why teacher opinion of teacher student relationships would vary according to the subjects they taught was not clear. The explanation may lie in the fact that some subjects provided a greater opportunity to observe student to student and teacher to student interaction during a trimester.

4.42 Remaining Nominal Data Items Associated With Factor Three

On the variables of teacher position in the school, number of years teachers had been at Lindsay Thurber, the number of years of teaching experience and the level of teacher professional preparation, teacher opinion did not vary significantly.

TABLE 73

FACTOR THREE ITEMS ON WHICH TRIMESTER TEACHERS
DIFFERED ACCORDING TO THE SUBJECTS THEY TAUGHT

(N = 63)

ITEM	BUSINESS ED. n = 7	ENGLISH n = 10	MATH n = 5	MOD LANG. n = 4	PHYS.ED. n = 4	SCIENCE n = 9	SOC. ST. n = 8	VOC. ED. n = 11	FINE ARTS n = 5
4	2.71	4.10	3.00	2.75	3.00	2.67	3.37	1.91	4.00
22	2.86	3.60	3.20	3.25	3.00	2.78	2.88	2.18	3.20
23	2.71	3.70	3.20	3.50	3.00	2.44	3.13	2.18	3.20
Average Score on the Factor	2.76	3.80	3.13	3.17	3.00	2.63	3.13	2.09	3.47

4.5 Factor Four: Student Adjustment at High School

It can be seen from examination of Table 74 that teachers held a less favourable opinion of student adjustment at Lindsay Thurber than the trimester students who recorded an average score on the factor of 2.65. A further difference occurs between teacher and student scores on Item 7 on which students recorded the favourable score of 2.78 while teachers recorded the unfavourable score of 3.46. Item 7 refers to problems experienced by students coming to Lindsay Thurber from a junior high school. From the questionnaire it cannot be ascertained whether students and teachers were describing the same type of problems.

TABLE 74

TRIMESTER TEACHER MEAN SCORES ON FACTOR FOUR

(N = 68)

ITEM	VARIANCE	S. DEV.	MEAN
7	1.13	1.10	3.46
12	1.33	1.18	3.04
26	1.27	1.15	2.96
27	1.11	1.09	3.34
Average score on the factor			3.20

Teachers as a group recorded a favourable opinion when asked whether the trimester system resulted in better student achievement than did other arrangements (Item 32) so it may be that teachers were thinking of students' social problems. On Item 26, which suggests that students have no difficulty establishing friendships during a trimester, teachers recorded a score of 2.96 so they tended to be divided in their opinion. The teachers' score on Item 27 indicates a belief

that students transferring in from another high school also experienced difficulty so it may be that they were thinking of the general problems associated with transferring into a large high school.

4.51 Trimester Teacher Opinion on Factor Four According to the Subjects

They Taught Examination of Table 75 indicates that mathematics, modern languages and vocational education were the only subgroups out of the nine teaching subject subgroups that held a favourable opinion towards the trimester system on this factor. Among the other subgroups teachers of English and of fine arts held clearly unfavourable opinions. Teachers recorded their most unfavourable opinion on Item 7 which suggests that students have hardly any problems transferring in from junior high school. This is an important finding because the majority of students transfer in from junior high school and these findings suggest that teachers believed students did have problems. The less unfavourable teacher responses to Item 12, which suggests that these difficulties are specifically related to the trimester, imply that some of these difficulties were related to school factors other than the trimester system.

4.52 Trimester Teacher Opinion on Factor Four According to the Years

Spent in the School Teachers who had been in the school for five years or less disagreed strongly with Item 7, which suggests that students transferring into Lindsay Thurber Comprehensive High School from junior high school have hardly any problems. Their "disagree strongly" score of 4.19 contrasts sharply with the "agreement" score of 2.82 reported by teachers who had been in the school between ten and fifteen years and still more with the score of 2.75 for teachers who had been in the school for more than 15 years.

TABLE 75

FACTOR FOUR ITEMS ON WHICH TRIMESTER TEACHERS
DIFFERED ACCORDING TO THE SUBJECTS THEY TAUGHT
(N = 63)

ITEM	BUSINESS ED. n = 7	ENGLISH n = 10	MATH n = 5	MOD. LANG. n = 4	PHYS. ED. n = 4	SCIENCE n = 9	SOC. ST. n = 8	VOC. ED. n = 11	FINE ARTS n = 5
7	3.43	4.20	3.00	3.00	3.25	3.44	3.63	3.27	4.40
12	3.14	4.10	2.60	2.50	3.00	3.22	3.25	2.45	3.40
26	2.43	3.60	2.20	3.00	3.00	3.22	3.00	2.36	3.80
27	3.00	4.10	3.20	3.00	3.00	3.11	3.87	3.18	3.40
Average Score on the Factor	3.00	4.00	2.75	2.88	3.06	3.25	3.44	2.82	3.75

TABLE 76

A FACTOR FOUR ITEM ON WHICH TRIMESTER TEACHERS DIFFERED

ACCORDING TO THEIR YEARS IN THE SCHOOL

(N = 66)

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFÉ' PROB.
7	0 - 5 yrs	16	0.30	0.54	4.19	] p < 0.05
	6 - 9 yrs	29	1.10	1.05	3.62	
	10 - 15 yrs	17	1.15	1.07	2.82	] p < 0.05
	More than 15 years	4	0.92	0.96	2.75	

4.53 Trimester Teacher Opinion on Factor Four According to their

Years of Teaching Experience

On Item 7 the score of teachers with nine years or less of teaching experience differed significantly from the score reported by teachers with more than nineteen years of experience. These scores indicate that teachers with nine or less years of teaching experience disagreed with the item more strongly than teachers with more than nineteen years of experience.

TABLE 77

A FACTOR FOUR ITEM ON WHICH TRIMESTER TEACHERS DIFFERED

ACCORDING TO THEIR YEARS OF TEACHING EXPERIENCE

(N = 66)

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFÉ' PROB.
7	0 - 9 yrs	23	0.41	0.64	3.96	] p < 0.05
	10 - 19 yrs	23	1.51	1.23	3.35	
	More than 19 years	20	1.29	1.14	3.15	

4.6 Factor Five: Work Load

Examination of Table 78 indicates that teachers had an average score of 2.21 on the factor which was more favourable than the student average score of 2.69 on the same factor.

TABLE 78
TRIMESTER TEACHER MEAN SCORES ON FACTOR FIVE
(N = 68)

ITEM	VARIANCE	S. DEV.	MEAN
16	0.54	0.74	1.93
20	0.98	0.99	2.49
Average score on the factor			2.21

Clearly teachers did not believe that an excessive workload was imposed on students at Lindsay Thurber. A comparison of student and teacher mean scores on Item 16 indicates that both groups disagreed with the statement. This item suggests that students at Lindsay Thurber have too much homework. It is not surprising to find teachers disagreeing with this statement more emphatically than students.

4.61 Trimester Teacher Opinion on Factor Five According to the Subjects They Taught When teacher opinion was categorized according to the subjects they taught, all subgroups held a favourable opinion of the workload imposed on students at Lindsay Thurber Comprehensive High School (Table 79). The teachers of English and fine arts held the least favourable opinion.

4.62 Remaining Nominal Data Items Associated With Factor Five

None of the other teacher variables had a significant relationship with teacher opinion of Work Load at Lindsay Thurber.

TABLE 79

FACTOR FIVE ITEMS ON WHICH TRIMESTER TEACHERS
DIFFERED ACCORDING TO THE SUBJECTS THEY TAUGHT

(N = 63)

ITEM	BUSINESS ED. n = 7	ENGLISH n = 10	MATH n = 5	MOD.LANG. n = 4	PHYS.ED. n = 4	SCIENCE n = 9	SOC.ST. n = 8	VOC. ED. n = 11	FINE ARTS n = 5
16	1.57	2.20	1.80	2.25	2.00	1.78	2.12	1.91	2.00
20	2.14	3.30	2.00	2.50	2.50	2.44	2.12	2.45	3.00
Average Score on the Factor	1.86	2.75	1.90	2.37	2.25	2.11	2.12	2.18	2.50

4.7 Factor Six: Opportunity for Change

The average score on this factor of 1.80 recorded in Table 80 implies teacher-student concordance of perception of student appreciation for the opportunity for change offered by the trimester system.

TABLE 80

TRIMESTER TEACHER MEAN SCORES ON FACTOR SIX

(N = 68)

ITEM	VARIANCE	S. DEV.	MEAN
3	0.47	0.69	1.82
5	0.47	0.69	1.78
Average score on the factor			1.80

4.7.1 Trimester Teacher Opinion on Factor Six According to the Subjects

They Taught It is important to remember that data recorded in Table 81 refer to teacher perception of student preference for change. These data do not reflect appreciation of change. English, physical education and fine arts teachers indicated the least favourable opinion, while business and vocational education teachers recorded the most favourable opinion. Nevertheless, regardless of subject area, the trimester teachers reported scores in the favourable category.

4.8 Summary of Findings for Trimester Teachers

The findings of this section of Chapter IV indicated that on Learning Climate and Work Load trimester teachers recorded a favourable opinion. Their opinion on these factors was similar to that of the trimester students. Trimester teachers and students both recorded

TABLE 81

FACTOR SIX ITEMS ON WHICH TRIMESTER TEACHERS
DIFFERED ACCORDING TO THE SUBJECTS THEY TAUGHT

(N = 63)

ITEM	BUSINESS ED. n = 7	ENGLISH n = 10	MATH n = 5	MOD.LANG. n = 4	PHYS.ED. n = 4	SCIENCE n = 9	SOC.ST. n = 8	VOC.ED. n = 11	FINE ARTS n = 5
3	1.71	1.80	1.60	1.50	2.25	2.00	1.75	1.73	2.40
5	1.43	2.20	1.60	1.75	1.75	2.11	1.75	1.45	2.00
Average Score on the factor	1.57	2.00	1.60	1.62	2.00	2.06	1.75	1.59	2.20

divided opinions on Factor Two, Pace of Instruction. On Factor Three, Teacher Student Relationships, students recorded a favourable opinion but teacher opinion was divided. Teachers differed from the students' opinion on Factor Four, Student Adjustment at High School, and recorded an unfavourable opinion. On the factor Opportunity for Change student and teacher scores were in the "strongly favourable" category.

Analysis of the nominal data items revealed that the number of years a teacher had been at Lindsay Thurber had a minor relationship with Factors Three and Four. Of the remaining variables the only one having a significant relationship with teacher opinion was the subjects they taught. Considerable variation in teacher perception according to the subjects they taught was noted on all factors. In particular, the teachers of English and fine arts seemed most negative towards the trimester method for organizing the school year.

5. ANALYSIS OF RESPONSES MADE BY STUDENTS

WORKING AT JASPER PLACE HIGH SCHOOL

5.1 Overview

An analysis of semester student data has been based on the same clusters of items as indicated by the factor analysis of the trimester student responses. The average score on the factor has been calculated to indicate student opinion on each factor and is listed in Table 82. Individual items within the factors were examined to determine their contribution to the group average score on the factor. Student mean responses have been classified into subgroups according to the variables described in Chapter III. To establish the relationship of these variables to student opinion the average score on the factor for each subgroup within the variable has been calculated and compared, and a comparison made of the subgroup mean score on individual items. Table 83 contains a record of the items within the factors on which semester students differed according to the nominal data items.

To facilitate data reduction and ensure that item scores indicate a consistent opinion some item scores have been reflected so that all low scores indicate an opinion favourable to the semester system and all high scores indicate an opinion unfavourable to the semester system as practised at Jasper Place.

The set of conventions outlined on page 102 should be read before Table 82 is examined. It should also be noted that within this section of the thesis the terms Jasper Place students and semester students were used interchangeably and should be read as having the same meaning in this context.

TABLE 82

JASPER PLACE STUDENT AVERAGE SCORES ON THE FACTORS

(N = 212)

FACTOR	AVERAGE SCORE	DIRECTION OF OPINION
One: Learning Climate	2.45	Favourable
Two: Pace of Instruction	2.95	Divided
Three: Teacher Student Relationships	2.45	Favourable
Four: Student Adjustment at High School	2.53	Favourable
Five: Work Load	2.95	Divided
Six: Opportunity for Change	1.66	Strongly Favourable

TABLE 83

 ITEMS WITHIN THE FACTORS ON WHICH JASPER PLACE STUDENTS
 DIFFERED ACCORDING TO NOMINAL DATA ITEMS

GROUPS	FACTORS					
	ONE	TWO	THREE	FOUR	FIVE	SIX
Grade Level	Item 9 Item 1 Item 30	Item 17		Item 26		
Sex						Item 3 Av.Score
Years in School	Item 1					Item 5
Number of Courses						
Post High School Plans	Item 1 Item 30		Item 23			

5.2 Factor One: Learning Climate

Examination of Table 84 reveals an average score of 2.45 on the factor which indicates that students as a group had a favourable opinion of the semester system on Factor One, Learning Climate.

TABLE 84
JASPER PLACE STUDENT MEAN RESPONSES ON FACTOR ONE
(N = 212)

ITEM	VARIANCE	S. DEV.	MEAN
1	1.05	1.02	2.29
8	1.42	1.19	2.63
9	1.18	1.08	2.23
18	1.20	1.10	2.67
24	1.06	1.03	2.40
30	0.89	0.94	3.05
31	0.96	0.98	1.97
32	0.87	0.93	2.34
Average score on the factor			2.45

The students agreed most strongly with Item 31 showing that the majority of them believed the semester system facilitated students' planning of their own courses. It is interesting to link this with the mean score of 2.34 on Item 32 which indicates that students believed their results under the semester system were superior to those they

would have achieved under other arrangements. The item does not specify whether these achievements were academic but it seems probable that students would assume this.

By reporting an average score of 2.23 on Item 9, students indicated a perception on their part, that the longer class period provided time for more variety in classroom activities. This is contrary to findings reported in the literature of this study, where only half the students reported any change in teaching techniques after the implementation of the longer class period. It is wise to note that this item addresses the opportunity for more varied activities; it does not provide students with a chance to say whether these varied activities actually took place. Also within this factor students did seem to believe that the semester system motivated them to work harder because they awarded Item 1 a mean score of 2.29. The only item on which students did not indicate an opinion favourable to the semester system was the one asking for an opinion as to whether the system aids in development of a good school spirit. On this matter their mean score of 3.05 indicates that as a group they were divided.

5.21 Student Grade Level

When student responses relating to the Learning Climate were analysed in terms of grade level, the average scores on this factor for each grade did not differ significantly. This indicates that student opinion about the Learning Climate in the semester system was not dependent on their grade level at school.

A number of significant differences were found, however, in the responses to individual items within the factor and are reported in Table 85.

The opinions of Grade XI and Grade XII students differed on whether the short term of a semester motivated students to work harder (Item 1). Both groups held an opinion favourable to the semester but the Grade XI students' opinion was more in agreement with the item.

TABLE 85
FACTOR ONE ITEMS ON WHICH JASPER PLACE STUDENTS DIFFERED
ACCORDING TO THEIR GRADE LEVEL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
1	Grade X	31	0.89	0.95	2.19] p < 0.05
	Grade XI	104	0.78	0.88	2.13	
	Grade XII	74	1.46	1.21	2.55	
9	Grade X	31	1.77	1.33	2.65] p < 0.05
	Grade XI	104	1.08	1.04	2.29	
	Grade XII	74	1.01	1.01	1.97	
30	Grade X	31	0.73	0.85	2.74] p < 0.05
	Grade XI	104	0.85	0.92	3.00	
	Grade XII	74	0.96	0.98	3.27	

All grades agreed with the suggestion that the longer class period provided time for more variety in class room activities (Item 9). It is interesting to note a positive relationship between grade level and this agreement. The significant difference between Grade X students' opinion and Grade XII students' opinion on Item 9 suggests that the higher the grade the more likely students were to agree with Item 9.

Analysis of grade responses to Item 30 reveals that Grade X

students agreed with the statement that the semester system aids in development of a good school spirit. Grade XII students disagreed with this statement and differed significantly from the Grade X students. Jasper Place students' responses to Item 30 were similar to those of the trimester students to Item 30 in their questionnaire.

5.22 The Number of Years Students Had Spent at Their School

No significant differences occurred between the average score on the factor for each subgroup, however, examination of Table 86 shows students in their first year in the semester system have a mean response score of 2.03 which is the lowest of the student scores. An F-test indicated a probability level of 0.02 but some of the power of this indication is lost when a Scheffé probability level of 0.07 is reported.

TABLE 86

A FACTOR ONE ITEM ON WHICH JASPER PLACE STUDENTS DIFFERED SIGNIFICANTLY
ACCORDING TO THE YEARS THEY HAD SPENT AT THEIR SCHOOL

(N = 212)

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFÉ PROB.
1	One year	33	0.66	0.81	2.03	]—p 0.07
	Two years	101	0.82	0.91	2.17	
	Three years	72	1.49	1.22	2.58	

The Scheffé Multiple Comparison of Means Test tends to be conservative when variance in cell size occurs (Glass and Stanley, 1970:372). This finding has been reported because it might show that through continued association, the semester system loses some of its motivating power.

5.23 Student Post High School Plans

No significant differences were found between the average scores on Factor One for each group when students were classified according to their post high school plans. An analysis of Item 1 reveals that students planning to attend a university after high school believed in the motivating aspect more strongly than the group classified as "other".

TABLE 87

FACTOR ONE ITEMS ON WHICH JASPER PLACE STUDENTS DIFFERED SIGNIFICANTLY
ACCORDING TO THEIR POST HIGH SCHOOL PLANS

(N = 212)

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE PROB.
1	Institute	40	1.16	1.08	2.38] p < 0.05
	University	93	0.98	0.99	2.04	
	Work	46	0.79	0.89	2.46	
	Other	33	1.23	1.11	2.67	
30	Institute	40	0.96	0.98	2.90] p < 0.05
	University	93	1.00	1.00	3.23	
	Work	46	0.55	0.74	2.74	
	Other	33	0.78	0.88	3.18	

Students studying university orientated programs may be the intellectually gifted ones; if this is the case, these findings would indicate that intellectually gifted students are motivated to work harder by the short term goals available to students in the semester system at the Jasper Place Composite High School.

Examination of Item 30, which deals with the semester system's relationship with school spirit, reveals a significant difference of opinion between the group planning to attend a university after high school and the group planning to go to work. Those planning to go to university disagreed with the item, while those intending to go to work agreed with it.

5.24 Remaining Nominal Data Items Associated With Factor One

The variables of sex of student and the number of courses a student was taking in a term revealed no significant differences between average scores on the factor or on the individual items.

5.3 Factor Two: Pace of Instruction

An average score on this factor of 2.95 as reported in Table 88 indicates that if the distribution of the sample can be assumed normal then students were almost evenly divided between those who held a favourable opinion of pace of instruction in the semester system and those whose opinion was unfavourable. All Factor Two items have been reflected.

TABLE 88

JASPER PLACE STUDENT MEAN RESPONSES ON FACTOR TWO

(N = 212)

ITEM	VARIANCE	S. DEV.	MEAN
2	1.34	1.16	2.12
6	1.14	1.07	2.97
10	1.71	1.13	3.47
11	1.25	1.12	3.41
13	1.25	1.12	2.69
14	1.23	1.11	2.75
17	1.46	1.21	3.25
Average score on the factor			2.95

As recorded in Table 88, Item 2 received the lowest response of 2.12. Students appeared to believe that they performed better when courses were spread over one semester rather than a full school year. Scores of 3.47 and 3.41 on Items 10 and 11 respectively show that students held unfavourable opinions of the pace of instruction in a semester system because they believed that missing a few classes, and the time lapse between sequential courses caused substantial retardation of student progress.

5.31 Student Grade Level

Analysis of student responses to Item 17 reported in Table 89 indicates that most students feared failure more under the semester system than they did in courses spread over a longer period of time. Grade XII students were divided, however, and reported a mean score of 3.00. Agreement with the item was less the higher the grade level, ranging from 3.65 for Grade X, 3.29 for Grade XI and 3.00 for Grade XII. The Grade XII mean differs significantly from the mean score of the Grade X students.

TABLE 89

A FACTOR TWO ITEM ON WHICH JASPER PLACE STUDENTS DIFFERED
ACCORDING TO THEIR GRADE LEVEL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
17	Grade X	31	1.30	1.14	3.65	] p < 0.05
	Grade XI	104	1.33	1.15	3.29	
	Grade XII	74	1.67	1.29	3.00	

It may be that student anxiety is inversely related to their grade level, the higher the grade the lower the anxiety. It seems logical that students

who experienced success in the semester system in Grade X would manage to reduce their fear of failure by Grade XII. Nevertheless, it should be noted that the Grade XII mean response was at the divided level; hence, it may be argued that some Grade XII students feared failure more under the semester system than they did in longer term courses.

5.32 Remaining Nominal Data Items Associated With Factor Two

The variables of sex of student, number of years students have been in their school, number of courses students were taking in a term and post high school plans revealed no significant differences between the average score on the factor nor on the individual items for each subgroup. It is surprising to note a lack of significant differences between the opinions of students according to the number of courses they were taking in a term because almost half the students indicated concern about the pace of instruction and it might have been expected that students attempting to graduate early would have felt more pressure of work than students taking fewer courses.

5.4 Factor Three: Teacher Student Relationships

In Table 90 an average score on the factor of 2.45 is listed which indicates that students as a group held a favourable opinion towards teacher student relationships in their school. They agreed most strongly with Item 4 and this implies that they believed the semester was sufficiently long to enable them to get to know a teacher. They agreed less strongly with Item 23 which deals with the possibility that teachers got to know their students "quite well".

TABLE 90
JASPER PLACE STUDENT MEAN SCORES ON FACTOR THREE
(N = 212)

ITEM	VARIANCE	S. DEV.	MEAN
4	0.92	0.95	2.10
22	0.91	0.95	2.47
23	0.98	0.99	2.77
Average score on the factor			2.45

5.41 Students' Post High School Plans

It is interesting to note from Table 91 that three of the groups agreed with Item 23 indicating that they held opinions favourable towards the semester system. They apparently believed that teachers at their school got to know their students quite well.

TABLE 91
A FACTOR THREE ITEM ON WHICH JASPER PLACE STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THEIR POST HIGH SCHOOL PLANS
(N = 212)

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHIFFE' PROB.
23	Institute	40	0.90	0.95	2.65] — P < 0.05
	University	93	1.08	1.04	3.10	
	Work	46	0.74	0.86	2.46	
	Other	33	0.76	0.87	2.55	

Students going to university, however, were divided on Item 23 and their response differed significantly from the opinions of students planning to go to work. The average scores on this factor for each group did not differ significantly.

5.42 Remaining Nominal Data Items Associated With Factor Three

Further analysis of the data reveals that the variables of grade level, sex of student, years spent in their school and the number of courses they were taking were not significantly related to student opinion on this factor.

5.5 Factor Four: Student Adjustment at High School

Table 92 shows an average score on this factor of 2.53 which indicates that students as a group held an opinion favourable towards the semester system on Factor Four. Their strongest agreement was registered on Item 26 which states that students have no difficulty establishing friendships during a semester.

TABLE 92

JASPER PLACE STUDENT MEAN SCORES ON FACTOR FOUR

(N = 212)

ITEM	VARIANCE	S. DEV.	MEAN
7	1.32	1.15	2.87
12	1.38	1.18	2.34
26	1.02	1.01	2.15
27	0.91	0.95	2.76
Average score on the factor			2.53

On the subject of whether students had difficulty transferring in from a junior high school, they registered their highest score of 2.87. It seems that most students believed that they did not have serious problems adjusting to the semester system.

5.51 Student Grade Level

Comparisons of the average scores on this factor, of students classified according to grade level, reveal no significant differences. Analysis of Item 26, reported in Table 93, reveals that in each of the student subgroups the majority of students held the opinion that they had no difficulty in establishing friendships during a semester but Grade XII student opinion was significantly more favourable than that of Grade X students. The same was true for Grade XI students.

TABLE 93

A FACTOR FOUR ITEM ON WHICH JASPER PLACE STUDENTS
DIFFERED SIGNIFICANTLY ACCORDING TO THEIR GRADE LEVEL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE	PROB.
26	Grade X	31	1.58	1.26	2.61	] p	<0.05
	Grade XI	104	0.93	0.97	2.09		
	Grade XII	74	0.87	0.93	2.05		

5.52 Remaining Nominal Data Items Associated With Factor Four

Further analysis of the data reveals that the variables of sex of student, the number of years students had been in the school, the number of courses the students were taking in a term and student post high school plans were not significantly related to student opinion on this factor.

5.6 Factor Five: Work Load

Both items making up Factor Five suggest that the Jasper Place High School imposes too heavy a workload on students. Item 16 suggests that students have too much homework and Item 20 suggests that tests are given too frequently at Jasper Place. Table 94 reveals that on both items students tended to be divided in their opinion. The average score on the factor of 2.95 indicates that the student mean score was in the "divided" category.

TABLE 94

JASPER PLACE STUDENT MEAN SCORES ON FACTOR FIVE

(N = 212)

ITEM	VARIANCE	S. DEV.	MEAN
16	1.39	1.18	2.98
20	1.28	1.13	2.92
Average score on the factor			2.95

5.61 Nominal Data Items Tested Against Factor Five

On this factor, Work Load, student mean responses to Items 16 and 20 and the average score on the factor were in the "divided" category. No significant differences were found to exist between student mean responses according to grade level, sex of student, years in the school, number of courses and post high school plans.

5.7 Factor Six: Opportunity for Change

Items 3 and 5 solicit the students' opinions of their appreciation of opportunities to change courses and to change teachers each

semester. Examination of Table 95 reveals an average score on the factor of 1.66 indicating a student opinion strongly favourable towards this aspect of the semester system.

TABLE 95
JASPER PLACE STUDENT MEAN SCORES ON FACTOR SIX
(N = 212)

ITEM	VARIANCE	S. DEV.	MEAN
3	0.51	0.72	1.67
5	0.57	0.75	1.65
Average score on the factor			1.66

5.71 Comparison of Male and Female Student Responses

Table 96 reveals that male student and female student opinions differed significantly on this factor, both on the average score on the factor and on Item 3. Item 3 concerns student appreciation of the opportunity to change teachers and this study seems to indicate that female students held a more favourable opinion towards this facet of the semester system than male students.

TABLE 96
A FACTOR SIX ITEM ON WHICH JASPER PLACE STUDENTS
DIFFERED SIGNIFICANTLY ACCORDING TO THEIR SEX

ITEM	MALES \bar{X}_1 (n = 78)	FEMALES \bar{X}_2 (n = 134)	S. DEV. ₁	S. DEV. ₂	P	TWO TAIL
3	1.85	1.57	0.72	0.70		<0.05
Av. Score on factor	1.78	1.59	0.56	0.61		<0.05

5.72 Number of Years Students Have Been at Their School

Although average scores on this factor for students classified according to the years they have spent at Jasper Place Composite High School did not differ significantly, group mean scores on Item 5 did. Item 5 shows all subgroups held a strongly favourable opinion of the opportunity to change courses at the end of a term afforded by the semester system. The significant difference between the subgroup that had been in the system one year and the subgroup that had been in it three years indicates that students who had been associated with the semester system longer enjoy the opportunity to change courses more.

TABLE 97

A FACTOR SIX ITEM ON WHICH JASPER PLACE STUDENTS DIFFERED
SIGNIFICANTLY ACCORDING TO THE YEARS THEY HAD SPENT AT THEIR SCHOOL
(N = 206)

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFE' PROB.
5	One year	33	0.97	0.98	1.97	— p < 0.05
	Two years	101	0.50	0.71	1.61	
	Three years	72	0.48	0.69	1.53	

5.73 The Remaining Nominal Data Items Associated With Factor Six

Further analysis of the data reveals that the variables of student grade level, number of courses students were taking in a semester and students' post high school plans failed to reveal any significant differences on average scores on the factor or mean scores on the individual items.

5.8 Summary of Findings for Semester Students

This section of Chapter IV indicated that student responses to items supported the contention that they held a favourable opinion towards the semester system on four out of the six factors. Within these factors, Learning Climate, Teacher Student Relationships, Student Adjustment at High School and Opportunity for Change, minor divergence of opinion occurred on individual items which has been noted in this study. Divergence of opinion on individual items among students responding to the other two factors has also been described in this section.

Additional analysis revealed that student grade level was related to student opinion on Item 1, semester motivates students to work harder; Item 9, the longer class period provides time for more variety in classroom activities; Item 17, students fear failure more in a one semester course than in courses spread over more than one semester; Item 26, students have no difficulty establishing friendships during a semester and Item 30, semester aids in developing a good school spirit.

The sex of the student was related to Item 3, students appreciate the opportunity to change teachers and also to Factor Six, the Opportunity for Change.

The number of years a student had been in the school was related to Item 1, short term motivates students to work harder and Item 5, students appreciate the opportunity to change courses.

No items were significantly related to the number of courses a student was taking.

Student post high school plans were related to Item 1, semester motivates students to work harder; Item 23, teachers get to know their students quite well and Item 30, the semester aids in the development of good school spirit.

6. ANALYSIS OF RESPONSES MADE BY TEACHERS

WORKING AT JASPER PLACE HIGH SCHOOL

6.1 Overview

An analysis of semester teacher data has been based on the same clusters of items as indicated by the factor analysis of the trimester student responses. The average score on the factor has been calculated to indicate teacher opinion on each factor and is listed in Table 98. Individual items within the factors were examined to determine their contribution to the group average score on the factor. Teacher mean responses have been classified into subgroups according to the variables described in Chapter III. To establish the relationship of these variables to teacher opinion the average score on the factor for each subgroup within the variable has been calculated and compared, and a comparison made of the subgroup mean score on individual items. Table 99 contains a record of the items within the factors on which semester teachers differed according to the nominal data items.

To facilitate data reduction and ensure that item scores indicate a consistent opinion some item scores have been reflected so that all low scores indicate an opinion favourable to the semester system and all high scores indicate an opinion unfavourable to the semester system as practiced at Jasper Place.

The set of conventions outlined on page 102 should be read before Table 98 is examined. It should also be noted that within this section of the thesis the terms Jasper Place teachers and semester teachers were used interchangeably and should be read as having the same meaning within this context.

TABLE 98

JASPER PLACE TEACHER MEAN SCORES ON EACH FACTOR

(N=78)

FACTORS		AVERAGE SCORE	DIRECTION OF OPINION
One:	Learning Climate	2.64	Favourable
Two:	Pace of Instruction	2.81	Favourable
Three:	Student Teacher Relationships	2.63	Favourable
Four:	Student Adjustment	2.80	Favourable
Five:	Work Load	2.02	Favourable
Six:	Opportunity for Change	2.12	Favourable

TABLE 99

FACTOR ITEMS ON WHICH JASPER PLACE TEACHERS

DIFFERED ACCORDING TO THE NOMINAL DATA ITEMS

GROUP	FACTORS					
	ONE	TWO	THREE	FOUR	FIVE	SIX
Teacher Position	Item 24		Item 23			
Subjects Taught	All Items	All Items	All Items	All Items	All Items	All Items
Years at Jasper Pl.		Item 17	Item 23			
Years of Teaching Exp.						
Professional Preparation	Item 32 Av.Score	Item 6 Item 14 Av.Sc.		Item 7		Item 5

6.2 Factor One: Learning Climate

The average score on the factor for semester teachers indicates a favourable opinion of the Learning Climate at Jasper Place High School. Their opinion, however, is not as favourable as that of the Jasper Place students who recorded a score of 2.45.

TABLE 100
JASPER PLACE TEACHER MEAN SCORES ON FACTOR ONE
(N = 78)

ITEM	VARIANCE	S. DEV.	MEAN
1	1.41	1.19	2.64
8	1.21	1.10	2.69
9	0.92	0.96	2.00
18	0.99	0.99	2.83
24	0.73	0.85	2.59
30	0.44	0.66	3.19
31	0.75	0.86	2.29
32	0.80	0.89	2.85
Average score on the factor			2.64

Semester teachers' highest level of agreement was recorded on Item 9 which suggests that the longer class period provides time for more variety in classroom activities. This is an interesting finding because it means that students and teachers from both the trimester and semester systems believed the long class period provided time for more variety in classroom activities.

In fact the length of the class period can be independent of the school year organization but it is usually associated with the

compacted school year. These findings seem to indicate that the long class period was perceived favourably by teachers in both the trimester and the semester systems. It is prudent to recall that this item does not establish whether teachers did in fact vary their classroom activities.

Semester teachers recorded disagreement with Item 30 which suggested that the semester system aids in developing a good school spirit. Their responses to Item 18 which suggests that the semester system encourages students to attend classes regularly were not as strongly in agreement as those of the semester students; neither did they agree as strongly as the students with Item 32 which suggests that the semester system results in better student achievement than other arrangements.

6.21 Semester Teacher Opinion on Factor One According to Their Position in the School Agreement with the suggestion that teachers at this school review previous work at the beginning of a semester before going on to new work was indicated more strongly by the administrators than the teachers as illustrated in Table 101.

TABLE 101

A FACTOR ONE ITEM ON WHICH JASPER PLACE TEACHERS AND
ADMINISTRATORS DIFFERED

ITEM	\bar{X}_1 = TEACHERS (N = 67)	\bar{X}_2 = ADMINISTRATORS (N = 11)	S.DEV. ₁	S.DEV. ₂	P = 2 TAIL
24	2.67	2.09	0.86	0.70	0.04

It must be noted that the majority of semester students and teachers agreed with this statement.

6.22 Semester Teacher Opinion on Factor One According to Their

Professional Preparation The average score on the factor listed in Table 102 indicates that teachers with an M. Ed., equivalent or higher degree held a less favourable opinion of the learning climate in the semester system than did teachers with a B. Ed. equivalent or less. The two subgroups recorded differing opinions on Item 32.

TABLE 102

A FACTOR ONE ITEM ON WHICH JASPER PLACE TEACHERS DIFFERED
ACCORDING TO THEIR PROFESSIONAL PREPARATION

(N = 78)

ITEM	\bar{X}_1 , B. Ed. (n = 60)	\bar{X}_2 , M.Ed.OR MORE (n = 18)	S.DEV. ₁	S. DEV. ₂	P = TWO TAIL
32	2.72	3.28	0.87	0.89	p < 0.05
Av.Score on factor	2.51	2.84	0.54	0.59	p < 0.05

It is interesting to note that the more highly qualified teachers indicated disagreement with the suggestion that the semester system results in better student achievement. Their lack of confidence in this aspect of the semester system may be reflected to their response to Item 2 of Factor Two, where teachers indicated a preference for the ten-month school year.

6.23 Semester Teacher Opinion on Factor One According to the Subjects

They Taught The reader will note the small numbers involved in Table 103

TABLE 103

FACTOR ONE ITEMS ON WHICH JASPER PLACE TEACHERS DIFFERED

ACCORDING TO THE SUBJECTS THEY TAUGHT

(N = 78)

ITEM	BUS.ED. n = 7	ENGLISH n = 1	MATH n = 8	MOD. LANG. n = 5	PHYS. ED. n = 6	SCIENCE n = 11	SOC. ST. n = 8	VOC. ED. n = 17	FINE ARTS n = 8
1	2.71	1.00	2.63	3.33	2.17	2.73	3.25	2.11	3.00
8	2.43	2.00	3.00	2.33	2.50	2.73	3.38	2.56	2.43
9	1.86	1.00	2.50	2.33	1.67	2.00	2.00	1.89	1.57
18	2.71	2.00	2.75	3.33	2.17	2.36	3.25	2.61	3.29
24	2.00	1.00	2.75	1.67	2.83	2.64	3.38	2.50	2.71
30	2.86	2.00	3.38	3.33	2.83	3.09	3.25	3.00	3.43
31	2.14	2.00	2.63	2.67	2.00	1.91	2.50	2.22	2.29
32	2.57	2.00	3.38	3.33	2.33	2.36	2.75	2.72	3.14
Average score on factor	2.38	1.67	2.81	2.78	2.29	2.40	2.86	2.42	2.71

and will realize the need for caution when interpreting results. Column two which contains a response from only one teacher of English will be ignored. Despite these restrictions some interesting findings appear.

Examination of Table 103 indicates that when semester teacher responses were categorized according to the subjects they taught, and the average score on the factor calculated, the teachers of physical education recorded the most favourable opinion. Teachers of business education, science and vocational education also recorded a favourable opinion.

Teacher subgroup responses to Item 1 show that teachers of business education, mathematics, physical education, science and vocational education believed that the short term of the semester motivated students to work harder.

Responses to Item 9 show that teachers had a highly favourable opinion of the long class period because of the opportunity it offered them to have more variety in classroom activities. Conversely, however, responses to Item 8 show that they held a considerably less favourable opinion towards the long class period when they were asked whether it helped students achieve greater understanding. This seems to imply that the long class period was favoured by teachers when they saw a need for variety in classroom lessons. When, however, they were concerned with difficult concepts they were less enthusiastic and the teachers of mathematics showed a preference for a shorter period.

All teacher subgroups indicated agreement with Item 31, which suggests that the semester system provides students with the opportunity to plan their own program.

Teachers revealed a divided opinion on Item 32. On this item which suggests that the semester system results in better student achievement than do other arrangements, most teachers of mathematics, modern languages and fine arts tended to disagree with the item. The other teacher subgroups tended to agree with the item.

6.24 Remaining Nominal Data Items Associated With Factor One

When semester teacher mean responses were grouped according to the variables of the number of years a teacher had been a member of the staff at Jasper Place Composite High School, or the number of years of teaching experience, no significant differences were found between their mean scores on the items of Factor One.

6.3 Factor Two: Pace of Instruction

TABLE 104

JASPER PLACE TEACHERS' MEAN SCORES ON FACTOR TWO

(N = 78)

ITEM	VARIANCE	S. DEV.	MEAN
2	1.08	1.04	2.69
6	1.24	1.11	2.26
10	1.09	1.04	3.87
11	1.35	1.16	3.08
13	0.88	0.94	2.74
14	0.91	0.96	2.56
17	0.71	0.84	2.45
Average score on the factor			2.81

All item scores have been reflected.

Towards this factor teachers held a more favourable opinion than the semester students. This was an interesting finding because the three groups previously studied in this chapter tended to be divided over their opinion about the pace of instruction.

Inspection of Table 104 shows that semester teachers disagreed with Item 6 which suggests that in the semester system student learning tends to be superficial. This contrasted with semester students' scores which were divided on this issue. A divergence of opinion was found also on Item 17 which suggests that students fear failure more under a one semester course than in a course spread over more than one semester. Students agreed with this item but teachers disagreed. Responses to Item 10 indicated that teachers were more concerned about the retardation due to missing a few classes than students. Teachers' and students opinions on the other items tended to be similar.

6.31 Comparison of Teacher Opinion on Factor Two According to the Subjects They Taught

A comparison of the average scores on the factor for the teacher subgroups recorded in Table 105 reveals that although the teachers as a composite group recorded an average score on the factor of 2.81 (Table 104) teacher subgroup scores ranged from 2.16 to 3.19. Teachers of business education held a highly favourable opinion of the pace of instruction in the semester system while teachers of social studies and mathematics held an unfavourable opinion. Teachers of fine arts were divided in their response to this factor.

On Item 2 which suggests that courses spread over a full year, rather than completed in one semester, would help students perform better, the only subgroups which tended to agree were the teachers of social studies

TABLE 105

FACTOR TWO ITEMS ON WHICH JASPER PLACE TEACHERS DIFFERED
ACCORDING TO THE SUBJECTS THEY TAUGHT

(N = 78)

ITEM	BUS ED n = 7	ENGLISH n = 1	MATH n = 8	MOD. LANG. n = 3	PHYS. ED. n = 6	SCIENCE n = 11	SOC. ST. n = 8	VOC. ED n = 17	FINE ARTS n = 8
2	2.00	2.00	2.62	1.67	2.33	2.82	3.12	2.56	3.29
6	1.29	2.00	2.62	2.00	2.67	2.27	3.00	2.11	2.43
10	3.43	4.00	4.62	4.33	3.50	4.00	4.00	3.94	3.43
11	2.57	2.00	3.62	3.33	2.00	2.36	3.25	3.33	3.29
13	2.14	2.00	3.12	3.33	2.33	2.45	3.25	2.67	2.86
14	1.71	2.00	3.12	2.67	2.33	2.27	3.37	2.44	2.57
17	2.00	2.00	2.12	2.33	2.67	2.64	2.37	2.56	3.00
Average score on the factor	2.16	2.30	3.12	2.81	2.55	2.70	3.19	2.80	2.98

and fine arts. Teachers of modern languages were strongly supportive of the semester system with respect to this item.

Teacher subject subgroup responses indicated that with the exception of the social studies teachers all the subgroups strongly agreed with the suggestion that completing a course in one semester makes for superficial learning. All teacher subgroups agreed with Item 10 which deals with the retardation effect on students caused by missing a few classes in a semester. Response to Items 11 and 13 reveal that teacher perception of student learning retention related to the subjects they were teaching varied. It is interesting to note that teachers of mathematics, modern languages, social studies and fine arts returned scores on Item 11 which indicated that they believed the lapse between courses was too long. These data also indicated that except for teachers of fine arts all other teachers believed students did not fear failure more when a course was spread over one semester rather than a longer period.

6.32 Jasper Place Teacher Opinion According to the Number of Years They Had Been at Jasper Place Composite High School

Examination of Table 106 shows that the longer teachers had been at the school the more favourably they viewed the pace of instruction at Jasper Place Composite High School. The explanation for this may have been that there was a relationship between the number of years teachers had been in the school and their ability to compensate for problems particular to the pace of instruction in the semester system.

TABLE 106

A FACTOR TWO ITEM ON WHICH JASPER PLACE TEACHERS DIFFERED
ACCORDING TO THE NUMBER OF YEARS THEY HAD SPENT AT THEIR SCHOOL

ITEM	GROUP	NUMBER	VARIANCE	S. DEV.	MEAN	SCHEFFÉ' PROB.
17	0 - 5 yrs	29	0.84	0.92	2.86	} - p < 0.05
	6 - 9 yrs	36	0.52	0.72	2.22	
	10 - 15 yrs	12	0.51	0.72	2.17	

6.33 Jasper Place Teacher Opinion on Factor Two According to Their Professional Preparation Examination of Table 107 shows that teachers with a M. Ed. degree, equivalent or more tended to agree more that the trimester makes for superficial learning (Item 6) and that students find the pace of instruction in a one semester course too fast (Item 14), than teachers with a B. Ed or equivalent degree.

TABLE 107

FACTOR TWO ITEMS ON WHICH JASPER PLACE TEACHERS DIFFERED ACCORDING
TO THEIR PROFESSIONAL PREPARATION

(N = 78)

ITEM	\bar{X}_1 B.Ed. n = 60	\bar{X}_2 M.Ed. OR MORE n = 18	S.DEV. ₁	S.DEV. ₂	P = TWO TAIL
6	2.02	3.06	0.97	1.26	p < 0.05
14	2.45	2.94	0.93	1.00	p < 0.05
Av. Score on factor	2.70	3.16	0.66	0.72	p < 0.05

6.34 Remaining Nominal Data Items on Factor Two

The remaining variables were not significantly related to teacher opinion on Factor Two.

6.4 Factor Three: Student Teacher Relationships

Inspection of Table 108 reveals that semester teachers recorded an average score on the factor of 2.63 which indicates an opinion favourable to the semester system but not as favourable as that indicated by the semester students.

TABLE 108

JASPER PLACE TEACHERS' MEAN SCORES ON FACTOR THREE

(N = 78)

ITEM	VARIANCE	S. DEV.	MEAN
4	1.32	1.15	2.45
22	0.94	0.97	2.65
23	0.94	0.97	2.78
Average score on the factor			2.63

Students, who recorded a score of 2.10, and teachers, who recorded a score of 2.45, agreed with Item 4 which suggests that students got to know their teachers quite well. Both groups agreed with Item 23, which suggests that Jasper Place teachers got to know their students quite well.

6.41 Jasper Place Teachers' Opinion on Factor Three According to Their Position in the School

From Table 109 it can be seen that

administrators agreed more strongly than teachers with the statement that teachers at this school got to know their students quite well.

TABLE 109

A FACTOR THREE ITEM ON WHICH JASPER PLACE TEACHERS DIFFERED

ACCORDING TO THEIR POSITION IN THE SCHOOL

(N = 78)

ITEM	\bar{X}_1 = TEACHERS (N = 67)	\bar{X}_2 = ADMINISTRATORS (N = 11)	S.DEV. ₁	S.DEV. ₂	P. = TWO T.
23	2.88	2.18	0.99	0.60	0.03

6.42 Comparison of Jasper Place Teacher Opinion on Factor Three

According to the Subjects They Taught Why teacher opinion of teacher student relationships would vary according to the subject they taught is not clear. The explanation may lie in the fact that some subjects require a greater amount of student interaction in the classroom and, therefore, afford the teachers of those subjects a greater opportunity to observe student to student and teacher to student interaction. Examination of Table 110 provides some support for this proposition by the fact that teachers of social studies and fine arts differed from the other teacher groups.

Semester students held a favourable opinion of the semester system on this factor and their perception was supported by the teachers of business education, physical education and vocational education. Teachers of mathematics and social studies tended to disagree with the suggestion in Item 23 that teachers at this school get to know their students quite well.

TABLE 110
 FACTOR THREE ITEMS ON WHICH JASPER PLACE TEACHERS
 DIFFERED ACCORDING TO THE SUBJECTS THEY TAUGHT
 (N = 78)

ITEM	BUS.ED. n = 7	ENGLISH n = 1	MATH n = 8	MOD.LANG n = 3	PHYS.ED. n = 6	SCIENCE n = 11	SOC.ST. n = 8	VOC.ED n = 17	FINE ARTS n = 8
4	1.43	2.00	3.12	2.33	2.00	2.64	2.75	2.56	2.81
22	2.29	2.00	2.50	3.00	2.83	2.73	3.13	2.44	3.14
23	2.71	2.00	3.50	2.67	2.67	2.91	3.38	2.28	3.14
Average score on the factor	2.14	2.00	3.04	2.67	2.50	2.76	3.09	2.43	3.03

6.43 Comparison of Jasper Place Teacher Opinion on Factor Three

According to Their Years in the School Examination of Table 111 indicates that teachers who had stayed longest in the school tended to agree with Item 23 which suggests that teachers at the school got to know their students quite well.

TABLE 111

A FACTOR THREE ITEM ON WHICH JASPER PLACE TEACHERS DIFFERED
ACCORDING TO THEIR YEARS IN THE SCHOOL

ITEM	GROUP	NUMBER	VARIANCE	S.DEV.	MEAN	SCHEFFE	PROB.
23	0-5 yrs	29	0.85	0.92	2.93	p	<0.05
	6-9 yrs	36	0.96	0.98	2.89		
	10-15 yrs	12	0.88	0.94	2.17		

6.44 Remaining Nominal Data Items on Factor Three

On this factor the number of years of teaching experience and level of teacher professional preparation had no significant relationship with teacher opinion.

6.5 Factor Four: Student Adjustment at High School

On this factor semester teachers recorded an average score of 2.80 but the semester student average score on the factor was 2.53. This seems to indicate that teachers perceived students as having more adjustment problems than the students themselves perceived.

Students disagreed with the suggestion that they had problems associated with transferring in from junior high school, while teachers disagreed less strongly with the item. Another contrast occurred

between the two groups' perceptions of adjustment problems experienced by students transferring in from another high school (Item 27). This score of 2.64 has been reflected; hence, it indicates that teachers disagreed with this item. Students recorded a score of 2.76 which indicates that they disagreed with the item less strongly than teachers.

TABLE 112

JASPER PLACE TEACHERS' MEAN SCORES ON FACTOR FOUR

(N = 78)

ITEM	VARIANCE	S. DEV.	MEAN
7	1.04	1.02	3.51
12	0.85	0.92	2.63
26	0.83	0.91	2.42
27	0.69	0.83	2.64
Average score on the factor			2.80

6.51 Comparison of Teacher Opinion on Factor Four According to theSubjects they Taught

Teachers as a composite group held a less favourable opinion towards this factor than students. When teacher responses were categorized according to the subjects they taught the perceptions of the business education, physical education, science and vocational education teachers were similar to the student perceptions. All other teacher subgroups tended towards disagreement.

Teacher reaction to Item 7 was interesting because it dealt with student adjustment problems experienced after transfer-in from a

TABLE 113
 FACTOR FOUR ITEMS ON WHICH JASPER PLACE TEACHERS DIFFERED
 ACCORDING TO THE SUBJECTS THEY TAUGHT

(N = 78)

ITEM	BUS.ED. n = 7	ENGLISH n = 1	MATH. n = 8	MOD.LANG. n = 3	PHYS.ED. n = 6	SCIENCE n = 11	SOC.ST. n = 8	VOC.ED. n = 17	FINE ARTS n = 8
7	3.00	5.00	3.75	4.00	3.50	2.91	3.88	3.50	4.14
12	2.14	4.00	2.62	3.00	2.17	2.45	3.12	2.78	2.86
26	2.43	3.00	2.63	2.67	1.83	2.55	2.38	2.17	2.45
27	2.57	2.00	2.62	2.67	2.50	2.55	3.00	2.33	3.43
Average score on the factor	2.54	3.67	2.91	3.08	2.50	2.61	3.09	2.69	3.21

junior high school. As the majority of Jasper Place students transfer in from junior high school, teacher perceptions of the difficulties students experience were important. Inspection of Table 113 indicates that all teacher subgroups were either divided in their opinion or tended to disagree with the item.

6.52 Comparison of Teacher Opinion on Factor Four According to Their Professional Preparation Examination of Table 114 indicates that the teachers with the highest level of professional preparation again recorded the least favourable opinion towards the semester system.

TABLE 114

A FACTOR FOUR ITEM ON WHICH JASPER PLACE TEACHERS
DIFFERED ACCORDING TO THEIR PROFESSIONAL PREPARATION

(N = 78)

ITEM	\bar{X}_1 B.Ed. n = 60	\bar{X}_2 M.Ed.OR MORE n = 18	S.DEV. ₁	S.DEV. ₂	P = TWO TAIL
7	3.37	4.00	1.01	0.97	p < 0.05

In this instance they disagreed strongly with Item 7 which suggests that students have hardly any problems transferring-in from junior high school.

6.53 Remaining Nominal Data Items Associated With Factor Four

The other teacher variables had no significant relationship with teacher opinion towards Factor Four.

6.6 Factor Five: Work Load

On the factor Work Load teachers indicated a favourable opinion

towards Jasper Place Composite High School by indicating a mean score on Factor Five of 2.02 which is reported in Table 115. This implies that the majority of teachers did not believe that students at Jasper Place Composite High School had too much homework and too many tests. Students differed in their opinion from the teachers on this factor and scored 2.95; hence, they were divided in their views regarding Work Load.

TABLE 115

JASPER PLACE TEACHER MEAN SCORES ON FACTOR FIVE

(N = 78)

ITEM	VARIANCE	S. DEV.	MEAN
16	0.42	0.65	1.87
20	0.47	0.69	2.17
Average score on the factor			2.02

6.61 Comparison of Teacher Opinion on Factor Five According to the Subjects They Taught Comparison of the average score on this factor of the teacher subgroups indicates that, although all subgroups did not believe that students at Jasper Place experienced an excessive work load, there was a range of opinion among the subgroups. Teachers of business education, mathematics, science, social studies and vocational education disagreed strongly with student perception. The other three subgroups disagreed but not to the same extent. These results are recorded in Table 116. Teachers of fine arts held a perception of frequency of testing in the school similar to that of students, that is divided, but all other subgroups agreed with the item.

TABLE 116
FACTOR FIVE ITEMS ON WHICH JASPER PLACE TEACHERS DIFFERED
ACCORDING TO THE SUBJECTS THEY TAUGHT

(N = 78)

ITEM	BUS.ED n = 7	ENGLISH n = 1	MATH. n = 8	MOD.LANG. n = 3	PHYS.ED. n = 6	SCIENCE n = 11	SOC.ST. n = 8	VOC.ED. n = 17	FINE ARTS n = 8
16	1.43	2.00	1.62	2.00	2.00	1.82	1.75	1.89	2.43
20	2.14	2.00	2.25	2.00	2.50	2.00	2.00	2.06	2.36
Average score on the factor.	1.79	2.00	1.94	2.00	2.25	1.91	1.88	1.98	2.65

6.62 Remaining Nominal Data Items on Factor Five

The other four teacher variables had no significant relationship with teacher opinion towards this factor.

6.7 Factor Six: Opportunity for Change

The semester teacher average score on the factor of 2.12 recorded in Table 117 indicates that they perceived the opportunity to change courses and teachers as attractive to students.

TABLE 117

JASPER PLACE TEACHER MEAN SCORES ON FACTOR SIX

(N = 78)

ITEM	VARIANCE	S. DEV.	MEAN
3	0.59	0.77	2.15
5	0.56	0.75	2.08
Average score on the factor			2.12

Students, however, appreciated the opportunity to change aspect of the semester system more than teachers realized because their average score on this factor was 1.66.

6.71 Comparison of Teacher Opinion on Factor Six According to Their Professional Preparation

Examination of Table 118 shows that the teachers with an M.Ed. degree, equivalent or more did not agree with Item 5 as strongly as the teachers with lower qualifications. This is consistent with a tendency for the highly qualified group to agree less strongly with items favourable to the semester system than the less qualified.

This claim that a "tendency" exists is supported by an examination of Table 99 which shows that the opinion of teachers with an M.Ed or equivalent differed significantly from that of teachers with less professional preparation on five of the individual items and the average scores on Factor One, Learning Climate and Factor Two, Pace of Instruction. Examination of Tables 103, 107, 114 and 118 show that teachers with an M.Ed. equivalent or more tended to record a less favourable score than the teachers with a B.Ed. equivalent or less.

TABLE 118

A FACTOR SIX ITEM ON WHICH JASPER PLACE TEACHERS
DIFFERED ACCORDING TO THEIR PROFESSIONAL PREPARATION

(N = 78)

ITEM	\bar{X}_1 B.Ed. n = 60	\bar{X}_2 M.Ed.OR MORE n = 18	S.DEV. ₁	S.DEV. ₂	P = TWO TAIL
5	1.98	2.39	0.68	0.92	p < 0.05

6.72 Comparison of Teacher Opinion on Factor Six According to the Subjects They Taught Teacher subgroup average scores on this factor differed from 1.79 for business education teachers to 2.50 for social studies teachers. The teachers of business education, modern languages and physical education had similar perceptions to those of students as indicated by the student average score on this factor of 1.66. Teacher subgroup scores which differed most noticeably from those of the students were from teachers of mathematics, social studies and fine arts with average scores ranging from 2.25 up to 2.50. The scores for these sub-

TABLE 119
 FACTOR SIX ITEMS ON WHICH JASPER PLACE TEACHERS DIFFERED
 ACCORDING TO THE SUBJECTS THEY TAUGHT

(N = 78)

ITEM	BUS.ED n = 7	ENGLISH n = 1	MATH n = 8	MOD.LANG n = 3	PHYS.ED n = 6	SCIENCE n = 11	SOC.ST. n = 8	VOC.ED. n = 17	FINE ARTS n = 8
3	1.71	1.00	2.50	2.00	2.00	2.09	2.50	2.17	2.29
5	1.86	2.00	2.00	1.67	1.83	2.18	2.50	1.94	2.57
Average Score on factor	1.79	1.50	2.25	1.84	1.92	2.14	2.50	2.03	2.43

groups are recorded in Table 119.

6.73 Remaining Nominal Data Items Associated With Factor Six

The teacher variables of teacher position in the school, years of teaching experience and number of years a teacher had been at Jasper Place Composite High School had no significant relationship with teacher opinion on this factor.

6.8 Summary of Findings for Semester Teachers

Analysis in this section of Chapter IV indicated that teachers held a favourable opinion towards the semester system on all factors. The relationship of the five variables with teacher opinion were investigated by this study. Three of these variables; teacher position in the school, the number of years a teacher had been at Jasper Place Composite High School and the number of years of teaching experience, appeared to have little relationship with teacher opinion.

Examination of the relationship teacher professional preparation had with teacher opinion revealed that teachers with a B. Ed. equivalent or less held a favourable opinion of the Learning Climate and Pace of Instruction at Jasper Place Composite High School while those with an M. Ed. equivalent or more held an unfavourable opinion.

The subject being taught by a teacher appeared to have a strong relationship with teacher perception of the semester system at Jasper Place Composite High School. This was illustrated by the wide variance among the average scores on the factors for each of the teacher sub-groups.

7. SUMMARY OF CHAPTER IV

In this chapter the data gathered from students and teachers at Lindsay Thurber Comprehensive and Jasper Place Composite High Schools were analysed and discussed. In section one the design of the chapter was explained, followed by section two which contained evidence to support the establishment of six factors based on data supplied by students at Lindsay Thurber Comprehensive High School. These factors have been described and a list of the items included in each has been provided.

Section three contained a report of trimester student perception of the six factors as they relate to the trimester system. It also contained an analysis of the relationship the five student variables had on student perception.

In section four the perceptions of trimester teachers on the six factors, as they relate to the trimester system, were reported. The relevant data were analysed to reveal the extent to which the teacher variables were related to this perception.

Student responses from Jasper Place Composite High School were analysed in section five to show their perceptions of the semester system in terms of the six factors. The relationship of the five student variables to student opinion on the factors and individual items was ascertained.

Section six contained a report of the Jasper Place Composite High School teachers' perceptions of the semester system in terms of the six factors. An examination of the relationship the five teacher variables had with teacher perception was also included.

CHAPTER V

TESTING THE HYPOTHESES

1. INTRODUCTION

This chapter reports the testing of the hypotheses listed in Chapter II using the experimental design outlined in Chapter III. Section 2 of this chapter deals with hypotheses one to twelve which are used to investigate data collected from the student groups. In Section 3 the findings related to students have been summarized. Section 4 deals with hypotheses thirteen to twenty-four which are used to investigate data collected from the teacher groups. The findings related to teachers have been summarized and are recorded in Section 5.

2. TESTING HYPOTHESES RELATED TO STUDENT PERCEPTIONS OF SCHOOL YEAR ORGANIZATION

The enquiry posed in this section of the thesis is that if students in a trimester system were asked certain questions about their school year organization, would their answers be similar to the answers of students working in a semester system who were asked the same type of questions about semestered school year organization? Put another way, are students so immersed in their particular school year organization that their perceptions of it differ little from school to school?

In the course of this investigation twelve hypotheses were generated. To test these, comparisons were made between the average scores on the factor for each respondent group.

Hypotheses were rejected where differences between respondent group average scores on the factor were significant at or below the 0.05 level.

In the interests of clarity and brevity the results of the F-tests are reported in table form. This section concludes with a summary of the findings.

2.1 Factor One: Learning Climate

Hypothesis 1 states: There is no significant difference between the mean scores on Learning Climate of students from Bonnie Doon and Jasper Place Composite High Schools.

Hypothesis 2 states: There is no significant difference between the mean scores on Learning Climate of students from:

2a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

2b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 1 was not rejected at the required confidence level of 0.05. Examination of Table 120 indicates that on the average score on the factor the two semester groups did not differ significantly. Further examination of Table 120 shows that the scores of the two groups differed significantly on Item 8.

Hypothesis 2a was rejected at the confidence level of 0.05. Examination of Table 120, however, indicates that although a significant difference occurred between Bonnie Doon and Lindsay Thurber average scores on the factor additional significant differences occurred on only four of the eight items.

Hypothesis 2b was rejected. It should be noted, however, that

TABLE 120
TRIMESTER STUDENTS COMPARED WITH SEMESTER STUDENTS
ON FACTOR ONE ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST			REJECT HYPOTHESES		
	χ^2	Prob.	Group n	Mean	Scheffe' Prob.	1	2a	2b
1	2.04	0.36	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.31 2.29 2.15		No	No	No
8	7.28	0.03	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.90 2.63 2.41	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	Yes	Yes
9	1.68	0.43	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.31 2.23 2.03	$\left. \begin{array}{l} -p < 0.05 \end{array} \right\}$	No	Yes	No
18	0.90	0.64	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.79 2.67 2.30	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	No	Yes	Yes
24	0.58	0.75	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.37 2.40 2.46		No	No	No
30	8.80	0.01	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.89 3.05 3.10	$\left. \begin{array}{l} -p < 0.05 \end{array} \right\}$	No	Yes	No
31	1.47	0.48	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.02 1.97 1.97		No	No	No
32	2.92	0.23	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.53 2.34 2.39		No	No	No
Average score on factor	17.45	0.01	Bon. Doon 286 Jas. Pl. 212 Lin. Th. 758	2.51 2.45 2.35	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	No	Yes	Yes

although a significant difference occurred between the average scores on the factor of students from Jasper Place and Lindsay Thurber significant differences between respondent group scores on individual items occurred on only two of the eight items.

2.2 Factor Two: Pace of Instruction

Hypothesis 3 states: There is no significant difference between the mean scores on Pace of Instruction of students from Bonnie Doon and Jasper Place Composite High Schools.

Hypothesis 4 states: There is no significant difference between the mean scores on Pace of Instruction of the students from:

4a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

4b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 3 was not rejected at the required confidence level of 0.05 because it can be seen from Table 121 that the average score on the factor for the two semester groups did not differ significantly. Further investigation of Table 121 indicates that the mean scores of the two groups differed significantly on only one item.

Hypothesis 4a was not rejected at the required confidence level of 0.05 because examination of Table 121 indicates that there was no significant difference between Lindsay Thurber and Bonnie Doon average scores on the factor. Significant differences occurred, however, on scores from four of the seven items.

Hypothesis 4b was not rejected at the required confidence level of 0.05 because there was no significant difference between the respondent groups' average score on the factor. Further inspection of Table 121

TABLE 121
TRIMESTER STUDENTS COMPARED WITH SEMESTER STUDENTS
ON FACTOR TWO ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST				REJECT HYPOTHESES		
	χ^2	PROB.	Group	n	Mean	Scheffe' Prob.	3	4a	4b
2	6.48	0.04	Bon. Doon	286	2.50	$\left. \begin{array}{l} \text{---} p < 0.05 \\ \text{---} p < 0.05 \end{array} \right\}$	Yes	Yes	No
			Jas. Pl.	212	2.12				
			Lin. Th.	758	2.27				
6	7.48	0.02	Bon. Doon	286	2.82		No	No	No
			Jas. Pl.	212	2.97				
			Lin. Th.	758	2.85				
10	6.23	0.04	Bon. Doon	286	3.46	$\left. \begin{array}{l} \text{---} p < 0.05 \\ \text{---} p < 0.05 \end{array} \right\}$	No	Yes	Yes
			Jas. Pl.	212	3.47				
			Lin. Th.	758	3.71				
11	0.77	0.68	Bon. Doon	286	3.44		No	No	No
			Jas. Pl.	212	3.41				
			Lin. Th.	758	3.33				
13	1.15	0.56	Bon. Doon	286	2.93	$\left. \text{---} p < 0.05 \right\}$	No	Yes	No
			Jas. Pl.	212	2.69				
			Lin. Th.	758	2.59				
14	1.00	0.61	Bon. Doon	286	2.99		No	No	No
			Jas. Pl.	212	2.75				
			Lin. Th.	758	2.82				
17	2.12	0.35	Bon. Doon	286	3.09	$\left. \begin{array}{l} \text{---} p < 0.05 \\ \text{---} p < 0.05 \end{array} \right\}$	No	Yes	Yes
			Jas. Pl.	212	3.25				
			Lin. Th.	758	2.82				
Average score on Factor	11.03	0.00	Bon. Doon	286	3.03		No	No	No
			Jas. Pl.	212	2.95				
			Lin. Th.	758	2.91				

indicates that Jasper Place and Lindsay Thurber student mean scores differed on only two of the items.

2.3 Factor Three: Teacher Student Relationships

Hypothesis 5 states: There is no significant difference between the mean scores on Teacher Student Relationships of students from Bonnie Doon and Jasper Place Composite High Schools.

Hypothesis 6 states: There is no significant difference between the mean scores on Teacher Student Relationships of students from:

6a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

6b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 5 was not rejected at the required confidence level of 0.05. Examination of Table 122 indicates that Bonnie Doon and Jasper Place student scores did not differ significantly on the average score on the factor nor on any of the individual items.

Hypothesis 6a was not rejected at the required confidence level of 0.05. Examination of Table 122 indicates that a significant difference did not occur between the average scores on the factor for Bonnie Doon and Lindsay Thurber students nor on two of the three items.

Hypothesis 6b was rejected at the required confidence level of 0.05. Examination of Table 122 indicates that a significant difference occurred between the average scores on the factor for Jasper Place and Lindsay Thurber students, and on one of the three items.

2.4 Factor Four: Student Adjustment at High School

Hypothesis 7 states: There is no significant difference between the

TABLE 122

TRIMESTER STUDENTS COMPARED WITH SEMESTER STUDENTS
ON FACTOR THREE ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST				REJECT HYPOTHESES		
	χ^2	Prob.	Group	n	Mean	Scheffé Prob.	5	6a	6b
4	28.51	0.00	Bon. Doon	286	2.22	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	No	Yes	Yes
			Jas. Pl.	212	2.10				
			Lin. Th.	758	2.45				
22	4.71	0.09	Bon. Doon	286	2.53		No	No	No
			Jas. Pl.	212	2.47				
			Lin. Th.	758	2.60				
23	4.13	0.13	Bon. Doon	286	2.81		No	No	No
			Jas. Pl.	212	2.77				
			Lin. Th.	758	2.97				
Average score on factor	32.06	0.00	Bon. Doon	286	2.52	$\left. \begin{array}{l} -p < 0.05 \end{array} \right\}$	No	No	Yes
			Jas. Pl.	212	2.45				
			Lin. Th.	758	2.67				

mean scores on Student Adjustment at High School of students from Bonnie Doon and Jasper Place Composite High Schools.

Hypothesis 8 states: There is no significant difference between the mean score on Student Adjustment at High School of students from:

8a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

8b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 7 was not rejected at the required confidence level of 0.05. Examination of Table 123 indicates that there were no significant differences between Bonnie Doon and Jasper Place student scores on the average scores on the factor nor on any individual items.

Hypothesis 8a was not rejected at the required confidence level of 0.05. Examination of Table 123 indicates that Bonnie Doon and Lindsay Thurber student scores did not differ significantly on the average scores on the factor. Further inspection of Table 123 reveals that the groups differed significantly on only two individual items.

Hypothesis 8b was not rejected at the required confidence level of 0.05. Examination of Table 123 reveals that Jasper Place and Lindsay Thurber student scores did not differ significantly on the average scores on the factor. Further inspection of Table 123 reveals that the groups differed significantly on only two items.

2.5 Factor Five: Work Load

Hypothesis 9 states: There is no significant difference between the mean scores on Work Load of students from Bonnie Doon and Jasper Place Composite High Schools.

Hypothesis 10 states: There is no significant difference between the mean scores on Work Load of students from:

TABLE 123
TRIMESTER STUDENTS COMPARED WITH SEMESTER STUDENTS
ON FACTOR FOUR ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST				REJECT HYPOTHESES		
	χ^2	Prob.	Group	n	Mean	Scheffe' Prob.	7	8a	8b
7	3.03	0.22	Bon. Doon	286	3.09] - p < 0.05	No	Yes	No
			Jas. Pl.	212	2.87				
			Lin. Th.	758	2.78				
12	0.17	0.92	Bon. Doon	286	2.51		No	No	No
			Jas. Pl.	212	2.34				
			Lin. Th.	758	2.37				
26	4.21	0.12	Bon. Doon	286	2.25] - p < 0.05	No	No	Yes
			Jas. Pl.	212	2.15				
			Lin. Th.	758	2.36				
27	4.22	0.12	Bon. Doon	286	2.69] - p < 0.05] - p < 0.05	No	Yes	Yes
			Jas. Pl.	212	2.76				
			Lin. Th.	758	3.00				
Average score on factor	4.15	0.12	Bon. Doon	286	2.60		No	No	No
			Jas. Pl.	212	2.53				
			Lin. Th.	758	2.65				

10a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

10b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 9 was not rejected at the required confidence level of 0.05. Examination of Table 124 indicates that there were no significant differences between Bonnie Doon and Jasper Place student average scores on the factor nor on the individual items.

TABLE 124
TRIMESTER STUDENTS COMPARED WITH SEMESTER STUDENTS
ON FACTOR FIVE ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F-TEST				REJECT HYPOTHESES		
	χ^2	Prob.	Group	n	Mean	Scheffé Prob	9	10a	10b
16	0.02	0.99	Bon. Doon	286	3.09] -p <0.05] -p <0.05	No	Yes	Yes
			Jas. Pl.	212	2.98				
			Lin. Th.	758	2.69				
20	3.25	0.20	Bon. Doon	286	2.97] p <0.05] -p <0.05	No	Yes	Yes
			Jas. Pl.	212	2.92				
			Lin. Th.	758	2.68				
Average score on factor	1.50	0.47	Bon. Doon	286	3.03] -p <0.05] -p <0.05	No	Yes	Yes
			Jas. Pl.	212	2.95				
			Lin. Th.	758	2.69				

Hypothesis 10a was rejected at the required confidence level of 0.05 because Bonnie Doon and Lindsay Thurber student scores differed significantly on both the average score on the factor and the two individual items.

Hypothesis 10b was rejected at the required confidence level of 0.05. Examination of Table 124 indicates that Jasper Place and Lindsay Thurber

student scores differed significantly on the average score on the factor and on both individual items.

2.6 Factor Six: Opportunity for Change

Hypothesis 11 states: There is no significant difference between the mean scores on Opportunity for Change of students from Bonnie Doon and Jasper Place Composite High Schools.

Hypothesis 12 states: There is no significant difference between the mean scores on Opportunity for Change of students from:

12a: The semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

12b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

TABLE 125

TRIMESTER STUDENTS COMPARED WITH SEMESTER STUDENTS

ON FACTOR SIX ITEMS

ITEM	HOMOGENEITY		F-TEST				REJECT		
	OF VARIANCE						HYPOTHESES		
	X ²	Prob.	Group	n	Mean	Scheffe' Prob.	11	12a	12b
3	3.36	0.11	Bon. Doon	286	1.75		No	No	No
			Jas. Pl.	212	1.67				
			Lin. Th.	758	1.70				
5	0.90	0.64	Bon. Doon	286	1.63		No	No	No
			Jas. Pl.	212	1.65				
			Lin. Th.	758	1.57				
Average score on factor			Bon. Doon	286	1.69		No	No	No
			Jas. Pl.	212	1.66				
			Lin. Th.	758	1.64				

Discussion: Hypothesis 11 was not rejected at the required confidence level of 0.05. Examination of Table 125 reveals that there were no significant differences between Bonnie Doon and Jasper Place student average scores on the factor nor on the individual items.

Hypothesis 12a was not rejected at the required confidence level of 0.05. Examination of Table 125 reveals that there were no significant differences between Bonnie Doon and Lindsay Thurber student average scores on the factor nor between individual item scores.

Hypothesis 12b was not rejected at the required confidence level of 0.05. Examination of Table 125 reveals that there were no significant differences between Jasper Place and Lindsay Thurber student average scores on the factor nor between individual item scores.

3. SUMMARY OF THE FINDINGS RELATED TO STUDENTS

Examination of Table 126 indicates that when the responses of students from Bonnie Doon and Jasper Place, both semester schools, were compared, using the rules laid down by this thesis, they did not differ significantly on any of the six factors. When the responses of students from Bonnie Doon, a semester school, were compared with the responses of students from Lindsay Thurber, a trimester school, they did not differ significantly on Pace of Instruction, Teacher Student Relationships, Student Adjustment at High School and Opportunity for Change. On Factor One, Learning Climate and Factor Five, Work Load the two respondent groups differed significantly.

TABLE 126

SUMMARY OF HYPOTHESES COMPARING TRIMESTER AND SEMESTER
STUDENT PERCEPTIONS OF THEIR SCHOOL YEAR ORGANIZATION

FACTOR	HYPOTHESES		
	B.D.and J.P.	B.D.and L.T.	J.P.and L.T.
One: Learning Climate	1. Not Rejected	2a. Rejected	2b. Rejected
Two: Pace of Instruction	3. Not Rejected	4a. Not Rejected	4b. Not Rejected
Three: Teacher Student Relationships	5. Not Rejected	6a. Not Rejected	6b. Rejected
Four: Student Adjustment at High School	7. Not Rejected	8a. Not Rejected	8b. Not Rejected
Five: Work Load	9. Not Rejected	10a. Rejected	10b. Rejected
Six: Opportunity for Change	11. Not Rejected	12a. Not Rejected	12b. Not Rejected

When the responses of students from Jasper Place, a semester school, were compared with the responses from Lindsay Thurber, a trimester school, they did not differ significantly on Pace of Instruction, Student Adjustment at High School and Opportunity for Change. On Factor One, Learning Climate; Factor Three, Teacher Student Relationships and Factor Five, Work Load; the two respondent groups differed significantly.

4. TESTING HYPOTHESES RELATED TO TEACHERS' PERCEPTIONS OF SCHOOL YEAR ORGANIZATION

The enquiry posed in this section of the thesis is that if teachers were asked certain questions about their school year organization would their answers be similar to the answers of teachers working in a different school year organization who were asked the same type of questions? Put another way, are teachers so immersed in their school year organization that their perception of it differs little from school to school.

In the course of this enquiry twelve hypotheses were generated. Within this section these hypotheses are stated and to test them a comparison has been made between the mean responses of each teacher respondent group to the average scores on each factor. The scores on the individual items associated with each factor have also been computed and compared. The results of the F-tests have been presented in tabulated form. Hypotheses were rejected where differences between respondent group average scores on the factor were significant at or below the 0.05 level of significance.

4.1 Factor One: Learning Climate

Hypothesis 13 states: There is no significant difference between the mean scores of teachers from Bonnie Doon and Jasper Place Composite High Schools on Learning Climate.

Hypothesis 14 states: There is no significant difference between the mean scores on Learning Climate of teachers from:

TABLE 127

TRIMESTER TEACHERS COMPARED WITH SEMESTER TEACHERS

ON FACTOR ONE ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST				REJECT HYPOYHESES		
	X^2	Prob.	Group	n	Mean	Scheffe' Prob	13	14a	14b
1	1.97	0.37	Bon. Doon	38	3.61	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	Yes	No
			Jas. Pl.	78	2.64				
			Lin. Th.	68	2.34				
8	0.57	0.75	Bon. Doon	38	3.58	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	Yes	No
			Jas. Pl.	78	2.69				
			Lin. Th.	68	2.71				
9	0.86	0.65	Bon. Doon	38	2.37		No	No	No
			Jas. Pl.	78	2.00				
			Lin. Th.	68	2.09				
18	0.86	0.65	Bon. Doon	38	3.55	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	Yes	No
			Jas. Pl.	78	2.83				
			Lin. Th.	68	2.49				
24	1.09	0.58	Bon. Doon	38	2.79	$\left. \begin{array}{l} -p < 0.05 \end{array} \right\}$	No	Yes	No
			Jas. Pl.	78	2.59				
			Lin. Th.	68	2.35				
30	13.66	0.00	Bon. Doon	38	3.71	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	No	Yes
			Jas. Pl.	78	3.19				
			Lin. Th.	68	3.60				
31	1.89	0.39	Bon. Doon	38	2.87	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	Yes	No
			Jas. Pl.	78	2.29				
			Lin. Th.	68	2.26				
32	0.56	0.76	Bon. Doon	38	3.63	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	Yes	No
			Jas. Pl.	78	2.85				
			Lin. Th.	68	2.81				
Average score on factor	2.56	0.28	Bon. Doon	38	3.26	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	Yes	No
			Jas. Pl.	78	2.64				
			Lin. Th.	68	2.58				

14a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

14b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Data recorded in Table 127 indicate that the two semester groups had significantly different scores on their average factor scores and they also differed on six of the eight individual items. This provides sufficient evidence to reject Hypothesis 13.

Hypothesis 14a was rejected because the average scores on the factor differed significantly. Further analysis of the data revealed that only on Items 9 and 30 were the differences not statistically significant. Item 9 suggests that the longer class period provides time for more variety in classroom activities and Item 30 suggests that the form of school year organization practised by the school aids in the development of a good school spirit.

Hypothesis 14b could not be rejected because the average scores on the factor for the two groups do not differ significantly. Inspection of the individual items reveals that only on Item 30, which suggests that the semester or trimester system aids in the development of a good school spirit, do the groups differ significantly.

4.2 Factor Two: Pace of Instruction

Hypothesis 15 states: There is no significant difference between the mean scores of teachers from Bonnie Doon and Jasper Place Composite High Schools on items associated with Pace of Instruction.

Hypothesis 16 states: There is no significant difference between the mean scores on Pace of Instruction from:

TABLE 128

TRIMESTER TEACHERS COMPARED WITH SEMESTER TEACHERS
ON FACTOR TWO ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST				REJECT HYPOTHESES		
	χ^2	Prob.	Group	n	Mean	Scheffe' Prob.	15	16 _a	16 _b
2	4.49	0.11	Bon. Doon	38	3.61] -p <0.05	Yes	No	No
			Jas. Pl.	78	2.69				
			Lin. Th.	68	3.16				
6	5.09	0.08	Bon. Doon	38	3.53] -p <0.05] -p <0.05	Yes	Yes	No
			Jas. Pl.	78	2.26				
			Lin. Th.	68	2.75				
10	4.77	0.09	Bon. Doon	38	4.45] -p <0.05	Yes	No	No
			Jas. Pl.	78	3.87				
			Lin. Th.	68	4.04				
11	5.32	0.07	Bon. Doon	38	4.24] -p <0.05] -p <0.05	Yes	Yes	No
			Jas. Pl.	78	3.08				
			Lin. Th.	68	3.31				
13	5.10	0.09	Bon. Doon	38	3.47] -p <0.05] -p <0.05	Yes	Yes	No
			Jas. Pl.	78	2.74				
			Lin. Th.	68	2.82				
14	2.48	0.29	Bon. Doon	38	3.61] -p <0.05] -p <0.05	Yes	Yes	No
			Jas. Pl.	78	2.56				
			Lin. Th.	68	2.97				
17	1.52	0.47	Bon. Doon	38	2.50		No	No	No
			Jas. Pl.	78	2.45				
			Lin. Th.	68	2.10				
Average score on factor	6.40	0.04	Bon. Doon	38	3.63] -p <0.05] -p <0.05	Yes	Yes	No
			Jas. Pl.	78	2.81				
			Lin. Th.	68	3.02				

16a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

16b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 15 was rejected because the average scores on the factor for the two groups of semester teachers differed significantly as indicated by an inspection of the data in Table 128.

Furthermore, their scores on six out of the seven items associated with the factor, Pace of Instruction, differed significantly. The only item on which the two groups did not differ significantly was Item 17, which suggests that students fear failure more in the compacted school year than in a course spread over a full year.

Hypothesis 16a was rejected because the average scores on the factor for the two groups differed significantly. Further inspection of Table 128 reveals that the groups did not differ significantly on Items 2, 10 and 17.

Hypothesis 16b was not rejected because examination of Table 128 indicates that there were no significant differences between the mean scores of teachers on the average scores on the factor nor on any of the individual items.

4.3 Factor Three: Teacher Student Relationships

Hypothesis 17 states: There is no significant difference between the mean scores of teachers from Bonnie Doon and Jasper Place Composite High Schools on Teacher Student Relationships.

Hypothesis 18 states: There is no significant difference between the mean scores on Teacher Student Relationships of teachers from:

TABLE 129

TRIMESTER TEACHERS COMPARED WITH SEMESTER TEACHERS
ON FACTOR THREE ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST				REJECT HYPOTHESES		
	χ^2	Prob.	Group	n	Mean	Scheffé' Prob.	17	18 _a	18 _b
4	2.10	0.35	Bon. Doon	38	3.29	$\left. \begin{array}{l} -p < 0.05 \\ -p < 0.05 \end{array} \right\}$	Yes	No	Yes
			Jas. Pl.	78	2.45				
			Lin. Th.	68	2.96				
22	1.73	0.42	Bon. Doon	38	3.00		No	No	No
			Jas. Pl.	78	2.65				
			Lin. Th.	68	2.88				
23	4.76	0.09	Bon. Doon	38	3.26		No	No	No
			Jas. Pl.	78	2.78				
			Lin. Th.	68	2.93				
Average score on factor	6.49	0.08	Bon. Doon	38	3.18	$\left. \begin{array}{l} -p < 0.05 \end{array} \right\}$	Yes	No	No
			Jas. Pl.	78	2.63				
			Lin. Th.	68	2.92				

18a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

18b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 17 was rejected because inspection of Table 129 indicates that Bonnie Doon and Jasper Place teacher responses differed significantly on the average score on the factor. They also differed significantly on one of the three individual items.

Hypothesis 18a was not rejected because inspection of Table 129 indicates that Bonnie Doon and Lindsay Thurber teacher responses differed significantly neither on the average score on the factor nor on any of the individual items.

Hypothesis 18b was not rejected at the required confidence level of 0.05. Inspection of Table 129 indicates that there were no significant differences between the responses of teachers from Jasper Place and Lindsay Thurber on the average scores on the factor nor on the individual items within the factor.

4.4 Factor Four: Student Adjustment at High School

Hypothesis 19 states: There is no significant difference between the mean scores on Student Adjustment at High School of teachers from Bonnie Doon and Jasper Place Composite High Schools.

Hypothesis 20 states: There is no significant difference between the mean scores on Student Adjustment at High School of teachers from:

20a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

20b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

TABLE 130

TRIMESTER TEACHERS COMPARED WITH SEMESTER TEACHERS
ON FACTOR FOUR ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST				REJECT HYPOTHESES		
	X^2	Prob.	Group	n	Mean	Scheffe' Prob.	19	20 _a	20 _b
7	0.58	0.75	Bon. Doon	38	3.82		No	No	No
			Jas. Pl.	78	3.51				
			Lin. Th.	68	3.46				
12	4.37	0.11	Bon. Doon	38	3.58] - p < 0.05] - p < 0.05	Yes	No	Yes
			Jas. Pl.	78	2.63				
			Lin. Th.	68	3.04				
26	3.79	0.15	Bon. Doon	38	2.89] - p < 0.05	No	No	Yes
			Jas. Pl.	78	2.42				
			Lin. Th.	68	2.96				
27	4.88	0.09	Bon. Doon	38	3.03] - p < 0.05	No	No	Yes
			Jas. Pl.	78	2.64				
			Lin. Th.	68	3.34				
Average score on factor	6.22	0.04	Bon. Doon	38	3.33] - p < 0.05] - p < 0.05	Yes	No	Yes
			Jas. Pl.	78	2.80				
			Lin. Th.	68	3.20				

Discussion: Hypothesis 19 was rejected at the required confidence level of 0.05. Examination of Table 130 reveals that a significant difference occurred between Bonnie Doon and Jasper Place teacher average scores on the factor. Item scores differed significantly on only one of the four items.

Hypothesis 20a was not rejected at the required confidence level of 0.05. Examination of Table 130 indicates that Bonnie Doon and Lindsay Thurber teacher responses did not differ significantly on the average score on the factor nor on the individual items.

Hypothesis 20b was rejected at the required confidence level of 0.05. Examination of Table 130 indicates that Jasper Place and Lindsay Thurber teacher responses differed significantly on the average score on the factor and on three of the four items. The only item on which a significant difference was not recorded was Item 7, students have hardly any problems in transferring in from junior high school.

4.5 Factor Five: Work Load

Hypothesis 21 states: There is no significant difference between the mean scores of teachers from Bonnie Doon and Jasper Place Composite High Schools on Work Load.

Hypothesis 22 states: There is no significant difference between the mean scores on Work Load of teachers from:

22a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

22b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 21 was not rejected because the average scores on the factor for Bonnie Doon and Jasper Place teachers did not differ

significantly. Furthermore, an inspection of the individual items recorded in Table 131 revealed no significant differences between the scores of each group on either item.

Hypothesis 22a was not rejected because the average factor score for Bonnie Doon and Lindsay Thurber teachers did not differ significantly. Furthermore, an inspection of the individual items recorded in Table 131 revealed no significant differences between the scores of each group on either item.

Hypothesis 22b was rejected because the average score on the factor for Jasper Place and Lindsay Thurber teachers differed significantly. Additional analysis of Table 131 indicates that a difference occurred between item scores on only one of the two items.

4.6 Factor Six: Opportunity for Change

Hypothesis 23 states: There is no significant difference between the mean scores of teachers from Bonnie Doon and Jasper Place Composite High Schools on Opportunity for Change.

Hypothesis 24 states: There is no significant difference between the mean scores on Opportunity for Change of teachers from:

24a: the semester system at Bonnie Doon and the trimester system at Lindsay Thurber;

24b: the semester system at Jasper Place and the trimester system at Lindsay Thurber.

Discussion: Hypothesis 23 was not rejected at the required confidence level of 0.05 because the average score on the factor for each group did not differ significantly. No group scores on individual items differed significantly either as can be seen from an inspection of Table 132.

Hypothesis 24a was rejected at the required confidence level of 0.05

TABLE 132

TRIMESTER TEACHERS COMPARED WITH SEMESTER TEACHERS
ON FACTOR SIX ITEMS

ITEM	HOMOGENEITY OF VARIANCE		F - TEST			REJECT HYPOTHESES			
	χ^2	Prob.	Group	n	Mean	Scheffe' Prob.	23	24 _a	24 _b
3	2.44	0.33	Bon. Doon	38	2.26	-p <0.05 -p <0.05	No	Yes	Yes
			Jas. Pl.	78	2.15				
			Lin. Th	68	1.82				
5	1.60	0.45	Bon. Doon	38	2.16	-p <0.05 -p <0.05	No	Yes	Yes
			Jas. Pl.	78	2.08				
			Lin. Th.	68	1.78				
Average score on factor	2.51	0.28	Bon. Doon	38	2.21	-p <0.05 -p <0.05	No	Yes	Yes
			Jas. Pl.	78	2.12				
			Lin. Th.	68	1.80				

based on the fact that the group scores differed significantly on the average scores on the factor and on the individual items.

Hypothesis 24b was rejected at the required level of 0.05. because the average scores on the factor for each group differed significantly. Inspection of the individual items revealed that the groups differed significantly on each item.

5. SUMMARY OF THE FINDINGS RELATED TO TEACHERS

Examination of Table 133 indicates that the responses from Bonnie Doon and Jasper Place teachers differed significantly on Learning Climate, Pace of Instruction, Teacher Student Relationships and Student Adjustment at High School. However, the respondents' scores did not differ significantly on Work Load nor Opportunity for Change.

Bonnie Doon and Lindsay Thurber teacher responses differed significantly on Learning Climate, Pace of Instruction and Opportunity for Change. On the factors, Teacher Student Relationships, Student Adjustment at High School and Work Load, the two respondent groups did not differ significantly.

Jasper Place and Lindsay Thurber teacher responses differed significantly on Student Adjustment at High School, Work Load and Opportunity for Change but did not differ significantly on Learning Climate, Pace of Instruction and Teacher Student Relationships.

6. SUMMARY OF CHAPTER V

In this chapter the twelve student related hypotheses and the twelve teacher related hypotheses were tested.

Inspection of the data revealed no significant differences between

TABLE 133

SUMMARY OF HYPOTHESES COMPARING THE TRIMESTER AND
SEMESTER TEACHER PERCEPTIONS OF THEIR SCHOOL YEAR ORGANIZATION

FACTOR	HYPOTHESES		
	B.D.and J.P.	B.D.and L.T.	J.P.and L.T.
One: Learning Climate	13. Rejected	14a. Rejected	14b. Not Rejected
Two: Pace of Instruction	15. Rejected	16a. Rejected	16b. Not Rejected
Three: Teacher Student Relationships	17. Rejected	18a. Not Rejected	18b. Not Rejected
Four: Student Adjustment at High School	19. Rejected	20a. Not Rejected	22b. Rejected
Five: Work Load	21. Not Rejected	22a. Not Rejected	22b. Rejected
Six: Opportunity for Change	23. Not Rejected	24a. Rejected	24b. Rejected

the scores of Bonnie Doon and Jasper Place students on any of the six factors.

Comparison of the scores from students at Bonnie Doon, a semester school, and Lindsay Thurber, a trimester school, revealed that scores from the two groups differed significantly on the factors, Learning Climate, and Work Load. The mean scores of the two groups did not differ significantly on the factors, Pace of Instruction, Teacher Student Relationships, Student Adjustment at High School and Opportunity for Change.

Comparison of the scores from students at Jasper Place, a semester school, and Lindsay Thurber, a trimester school, revealed that scores from the two groups differed significantly on the factors, Learning Climate, Student Teacher Relationships and Work Load. The mean scores of the two groups did not differ significantly on any of the other factors.

Examination of Table 133 reveals that Bonnie Doon and Jasper Place teacher scores differed significantly on four of the six factors, these being, Learning Climate, Pace of Instruction, Teacher-Student Relationships and Student Adjustment at High School. On the factors, Work Load and Opportunity for Change these teacher scores did not differ significantly.

Comparison of the Bonnie Doon and Lindsay Thurber teacher scores revealed that significant differences occurred on three factors, those of Learning Climate, Pace of Instruction and Opportunity for Change, while scores on the factors, Teacher-Student Relationships, Student Adjustment at High School and Work Load did not differ significantly.

Comparison of the Jasper Place and Lindsay Thurber teacher scores revealed that significant differences occurred on three factors, those of Student Adjustment at High School, Work Load and Opportunity for

Change. Scores on Learning Climate, Pace of Instruction and Teacher Student Relationships did not differ significantly.

CHAPTER VI

OVERVIEW OF THE STUDY AND CONCLUSION

1. INTRODUCTION

A review of the principal findings from the two types of compacted school year organization studied is presented in this chapter together with a discussion of conclusions which may be drawn from them. The relationship of the respondents' opinions with the particular school year organization in which they worked is discussed. Implications for practising educational administrators are outlined and the directions for further research suggested.

2. OVERVIEW OF THE STUDY

The Problem: This study has addressed itself to the problem of providing practising educational administrators with up-to-date information on student and teacher perceptions of the trimester and semester school year organizations. Specifically, teacher and student opinions on various aspects of the trimester system as practised at Lindsay Thurber Comprehensive High School were analysed and reported. Furthermore, the student and teacher opinions on similar aspects of the semester system as practised at Jasper Place Composite High School were also reported.

A further enquiry posed was: would respondents working in a trimester system give similar answers to respondents working in a semester system if they were asked the same type of questions? To answer this question, comparisons were made between data from Lindsay Thurber, Jasper Place and Bonnie Doon High Schools.

3. CONCLUSIONS BASED ON STUDENT DATA

In terms of administrative practicality it can be seen that despite some statistically significant differences all three student respondent groups were clearly supportive of their school year organization on Learning Climate, Teacher Student Relationships, Student Adjustment at High School and Opportunity for Change. It seems that school year organization was not sufficiently related to student opinion on these factors to permit educational administrators to distinguish the student perceived advantages and disadvantages of either system.

Further comparison of the factor scores shows that students from each school tended to be least favourable towards their particular school year organization on the factor, Pace of Instruction. Their most favourable responses were on Factor Six, Opportunity for Change. Students seemed to like the opportunity for change but it is hard to see how this can be provided without giving them the feeling of increased pace of instruction that comes with the shortening of the time span over which a course is spread. In fact the amount of work required from a student does not change; the same quantity of work is required over a shorter period of time but the student has fewer courses with which to deal. Perhaps the problem is one of perception. If this were the case, educational administrators planning to implement some form of compacted school year organization would be justified in incorporating a counselling program to help students plan their course load and study schedule to avoid the feeling that the "pace of instruction is too fast".

There is some indication from the data in this thesis that students most likely to be supportive of the trimester system were in Grade XII,

TABLE 134

A COMPARISON OF STUDENT MEAN SCORES ON THE SIX FACTORS

FACTOR	GROUP	NUMBER	MEAN	SCHÉFFÉ PROB	COMMENTS
<u>One</u> Learning Climate	Bonnie Doon	286	2.51	$\begin{array}{c} \text{---} p \\ \text{---} p \\ \text{---} p \end{array}$ $\begin{array}{c} <0.05 \\ <0.05 \\ <0.05 \end{array}$	The trimester group had the most favourable score on the factor and differed significantly from both semester groups.
	Jasper Place	212	2.45		
	Lindsay Thurber	758	2.35		
<u>Two</u> Pace of Instruction	Bonnie Doon	286	3.03		The trimester group had the most favourable score on this factor but the groups did not differ significantly.
	Jasper Place	212	2.95		
	Lindsay Thurber	758	2.91		
<u>Three</u> Teacher Student Relationship	Bonnie Doon	286	2.52	$\text{---} p$ <0.05	The trimester group had the least favourable score on this factor and differed significantly from Jasper Place.
	Jasper Place	212	2.45		
	Lindsay Thurber	758	2.67		
<u>Four</u> Student Adjustment	Bonnie Doon	286	2.60		The trimester group had the least favourable score but their opinion did not differ significantly from either semester group.
	Jasper Place	212	2.53		
	Lindsay Thurber	758	2.65		
<u>Five</u> <u>Work</u> Load	Bonnie Doon	286	3.03	$\text{---} p$ <0.05	The trimester group reported the most favourable score and differed significantly from both schools.
	Jasper Place	212	2.95		
	Lindsay Thurber	758	2.69		
<u>Six</u> Opportunity for Change	Bonnie Doon	286	1.69		All groups held strongly favourable opinions but did not differ significantly.
	Jasper Place	212	1.66		
	Lindsay Thurber	758	1.64		

had been in the school three years and were taking more than three courses.

Lindsay Thurber male students tended to view the trimester system more favourably than female students. Forty of the sixty students taking more than the "recommended" course load of three courses were males. From this the reader may infer that educational administrators wishing to meet the individual needs of some students could do so by using the trimester system in courses, such as automotives, where males dominate enrolment, or making trimester organization available to students who wish to accelerate their progress.

Analysis of student data based on the nominal data items revealed no strong negative opinions of the trimester from any subgroup. It would seem that educational administrators wishing to use the trimester system to cater for the needs of some students would be unlikely to meet strong opposition from the student body as a whole.

Analysis of Jasper Place student opinion according to the nominal data items revealed no consistent pattern among the differences.

4. CONCLUSIONS BASED ON TEACHER DATA

As was the case with the student data there were no consistent trends when a comparison was made between the opinions of trimester and semester teachers on the six factors measured by the questionnaires. Examination of Table 135, however, indicates that there tended to be a greater similarity between the scores of Lindsay Thurber and Jasper Place teachers than between the scores of Bonnie Doon and Jasper Place teachers. This suggests that school year organization was not the only independent variable being measured; hence, the findings of this thesis must really

TABLE 135

A COMPARISON OF TEACHER MEAN SCORES ON THE SIX FACTORS

FACTOR	GROUP	NUMBER	MEAN	SCHEFFÉ PROB.	COMMENTS
<u>One</u> Learning Climate	Bonnie Doon	38	3.26	<p>p < 0.05</p>	The trimester teachers had the most favourable score and differed significantly from Bonnie Doon teachers.
	Jasper Place	78	2.64		
	Lindsay Thurber	68	2.58		
<u>Two</u> Pace of Instruction	Bonnie Doon	38	3.63	<p>p < 0.05</p>	The two semester groups differed significantly. Bonnie Doon and Lindsay Thurber scores differed significantly.
	Jasper Place	78	2.81		
	Lindsay Thurber	68	3.02		
<u>Three</u> Teacher Student	Bonnie Doon	38	3.18	<p>p < 0.05</p>	Trimester teachers were again in the middle of this trio, but did not differ significantly.
	Jasper Place	78	2.63		
	Lindsay Thurber	68	2.92		
<u>Four</u> Student Adjustment at High School	Bonnie Doon	38	3.33	<p>p < 0.05</p>	The two semester groups differed significantly. Jasper Place and Lindsay Thurber teachers differed significantly. Trimester scores were in the middle.
	Jasper Place	78	2.80		
	Lindsay Thurber	68	3.20		
<u>Five</u> Work Load	Bonnie Doon	38	2.04	<p>p < 0.05</p>	Trimester teachers had the least favourable opinion and differed significantly from Jasper Place teachers.
	Jasper Place	78	2.02		
	Lindsay Thurber	68	2.21		
<u>Six</u> Opportunity for Change	Bonnie Doon	38	2.21	<p>p < 0.05</p>	Trimester teachers had the most favourable score and differed significantly from the other two groups.
	Jasper Place	78	2.12		
	Lindsay Thurber	68	1.80		

be considered as applying to three separate schools rather than to a comparison of trimester and semester school year organization.

Jasper Place teachers reported favourable scores on all factors while Bonnie Doon teachers reported favourable scores on only two. The difference between the scores of these two respondent groups cannot be explained by differences in school year organization. Something else was causing the difference and it would be useful to educational administrators if the factor or factors causing the difference could be located. Establishing an explanation for this difference is beyond the scope of this thesis.

Investigations reported in this thesis tend to indicate that the teachers most likely to be supportive of the trimester were those who had taught at Lindsay Thurber for ten or more years. At Jasper Place the teachers most likely to be supportive of the semester system held administrative positions or had taught at the school for ten or more years. Data from Bonnie Doon were not analysed according to the nominal data items.

The variable that was related to the opinion of both semester and trimester teachers on all factors was the subjects they taught. Tables 136 and 137 contain a ranking of subject specialists' average scores on the factor for the six factors. The top rank on each factor was given to the subgroup reporting the most favourable opinion. These ranks were summed and subject specialists' aggregate scores re-ranked on the basis of these totals, the number one rank going to lowest total score. From these aggregate ranks it may be concluded that the subject area specialists most likely to be supportive of the semester system at Jasper Place were those who taught business education, physical education and science

TABLE 136

RANKING OF JASPER PLACE TEACHERS' OPINIONS ON THE FACTORS
ACCORDING TO THE SUBJECTS THEY TAUGHT

SUBJECTS	FACTORS							Total of ranks	Reranking
	n	One	Two	Three	Four	Five	Six		
Business Education	7	3	1	2	2	1	2	11	1
English (b)	1	1	2	1	9	6	1	20	2
Mathematics	8	8	8	8	5	4	7	40	7
Modern Languages	3	7	6	5	6	6	3	33	6
Physical Education	6	2	3	4	1	8	4	22	3
Science	11	4	4	6	3	3	6	26	4
Vocational Education	17	5	5	3	4	5	6	28	5
Social Studies	8	9	9	9	7	2	9	45	8
Fine Arts	8	6	7	7	8	9	8	45	8

N.B. (a) In these ranks one is the most favourable and nine is the least favourable.
(b) English will be ignored because of the small number of subjects.

TABLE 137

RANKING OF TRIMESTER TEACHER OPINIONS ON THE FACTORS

ACCORDING TO THE SUBJECTS THEY TAUGHT

SUBJECTS	FACTORS							Total of ranks	Reranking
	n	One	Two	Three	Four	Five	Six		
Business Education	7	5	3	3	4	1	1	17	2
English	10	9	9	9	9	9	6	51	9
Mathematics	5	2	4	5	1	2	3	17	2
Modern Languages	4	7	6	7	3	7	4	34	6
Physical Education	4	6	7	4	5	6	6	34	6
Science	9	4	2	2	6	3	8	25	4
Social Studies	8	3	5	5	7	4	5	29	5
Vocational Education	11	1	1	1	2	5	2	12	1
Fine Arts	5	8	8	8	8	8	9	49	8

N.B. In these ranks one is the most favourable and nine is least favourable.

and those least likely to be supportive were the teachers who taught mathematics, social studies and fine arts. At Lindsay Thurber the teachers most likely to be supportive of the trimester system were those who taught vocational education, mathematics and business education. Those least likely to be supportive of the trimester system at Lindsay Thurber were the teachers of English and fine arts.

Table 138 shows the subject area specialists' re-ranks from Jasper Place and Lindsay Thurber High Schools. When these re-ranks were summed they provided a basis for dividing subject area specialists into two distinct categories. The subject area specialists who appeared most supportive of either form of compacted school year taught subjects which contained what might be described as a high proportion of empirical skills which students must master. The remaining subjects, the teachers of which appeared to be less supportive, contained less emphasis on empirical skills and more emphasis on creativity and interpretation of knowledge.

5. A COMPARISON OF THE SIX RESPONDENT GROUPS

The most striking feature of Table 139 is that a comparison of the average scores on the factors reveals that the only group to hold more than one unfavourable opinion was the teacher respondent group from Bonnie Doon Composite High School which held unfavourable opinions on four of the six factors. This contrasts sharply with the findings from all other groups which tended to be supportive of their respective school year organization on at least five of the six factors. As the Bonnie Doon teacher scores differed from the scores of all other semester groups it seems that some factor other than differences in school year organization was at work.

TABLE 138

RANKING OF JASPER FLACE AND LINDSAY THURBER TEACHER OPINIONS

ACCORDING TO THE SUBJECTS THEY TAUGHT

SUBJECT	JASPER FLACE	LINDSAY THURBER	SUMMED RANKS
<u>Exact Subject Areas</u>			
Business Education	1	2	3
Vocational Education	5	1	6
Science	4	4	8
Mathematics	7	2	9
Physical Education	3	6	9
<u>Interpretative Subject Areas</u>			
Modern Languages	6	6	12
Social Studies	8	5	13
Fine Arts	8	8	16
English	(?) *	9	(?)

* N. B. Only one teacher of English responded to the questionnaire.

TABLE 139

COMPARISON OF THE SIX SAMPLES ON THE SIX FACTORS

FACTOR	BONNIE DOON		JASPER PLACE		LINDSAY THURBER	
	Students	Teachers	Students	Teachers	Students	Teachers
One	2.51	3.26	2.45	2.64	2.35	2.58
Two	3.03	3.63	2.95	2.81	2.91	3.02
Three	2.52	3.18	2.45	2.63	2.67	2.92
Four	2.60	3.33	2.53	2.80	2.65	3.20
Five	3.03	2.04	2.95	2.02	2.69	2.21
Six	1.69	2.21	1.66	2.12	1.64	1.80
Totals	15.38	17.65	15.99	14.99	14.91	15.73

N.B. Figures used are the average score on the factor for each group.

Scores representing unfavourable responses have been outlined. e.g.

None of the student scores on any one factor differed by more than 0.4, hence, it seems that student opinions on the six factors were similar irrespective of the school year organization in which they worked. This could not be said of the teachers. The maximum difference between teacher scores on any one factor was 0.82. Teacher scores differed but the evidence does not suggest that this difference was due to differences in school year organization alone. Furthermore, it is interesting to note that the only group reporting favourable responses on all factors

were teachers from Jasper Place Composite High School.

6. RECOMMENDATIONS FOR FURTHER RESEARCH AND DEVELOPMENT

A major finding of this thesis was that teachers from two semester schools held different opinions on four of the six factors measured by the questionnaire. Clearly this was not due to differences in school year organization. Discovery of the reason for this difference was beyond the scope of this thesis but an explanation of it would be welcomed by educational administrators.

Another finding useful to educational administrators was that teachers of subjects containing an emphasis on empirical skills were more likely to be supportive of the compacted school year organization than teachers of subjects with an emphasis on interpretation of knowledge. Creating a high school timetable sufficiently flexible to cater to the demands of all teachers is an especially demanding task but would be of immense value to educational administrators.

Finally it can be seen from the data in this thesis that students from the trimester and semester systems reported their least favourable responses on the factor, Pace of Instruction and their most favourable response on the factor, Opportunity for Change. Student desires to avoid the feeling that the pace of instruction is "too fast" yet retain the opportunity for change may be irreconcilable. Research in this area could be justified because if a method to satisfy both these demands at once could be found educational administrators would be able to increase student satisfaction.

APPENDIX A

LINDSAY THURBER COMPREHENSIVE HIGH SCHOOL

STUDENT SURVEY

JUNE, 1975

Your School Board has asked us to examine the operation and effect of the trimester system at L.T.C.H.S.

In order to do this we need your assistance, which you can give by answering the following questions.

Please answer every question in this questionnaire. Do not supply your name.

PART A

1. Indicate the grade level in which you do most of your work at this time.

_____ 9
 _____ 10
 _____ 11
 _____ 12

2. What is your age?

_____ 13 or younger
 _____ 14
 _____ 15
 _____ 16
 _____ 17
 _____ 18
 _____ 19 or older

3. What is your sex?

_____ male
 _____ female

4. How many years, including this year, have you been at Lindsay Thurber?

_____ 1 _____ 3 _____ 5
 _____ 2 _____ 4

5. How many courses are you taking during the present trimester?

_____ 1 _____ 3
 _____ 2 _____ 4

6. Indicate below what you plan to do after high school.

_____ 1 Attend an Institute of Technology
 _____ 2 Attend a Business School
 _____ 3 Attend University
 _____ 4 Attend a Community College
 _____ 5 Work
 _____ 6 Other _____

APPENDIX B

LINDSAY THURBER COMPREHENSIVE HIGH SCHOOL

STAFF SURVEY

JUNE, 1975

Your School Board has asked us to examine the operation and effect of the trimester system at L.T.C.H.S.

In order to do this we need your assistance, which you can give by answering the following questions.

Please answer every question in this questionnaire. Do not supply your name.

PART A

1. What is your position?

Teacher _____
Counsellor _____
Department Head _____
Vice Principal _____
Principal _____
Other (name) _____

2. If you are teaching, what subjects do you teach? _____

3. For how many years have you been a member of the Lindsay Thurber staff? _____

4. How many years of teaching and/or administrative experience have you had in total? _____

5. What is your level of professional preparation?

_____ 1. Certificate but no degree
_____ 2. B.Ed. or equivalent degree
_____ 3. M.Ed. or equivalent degree
_____ 4. Preparation beyond the M.Ed.

APPENDIX C

LINDSAY THURBER HIGH SCHOOL
SURVEY

PART B

Think of the students you know in the school and indicate your agreement or disagreement with each of the following statements. Circle the response on the right that best describes how you feel about each statement

	Agree Strongly	Agree Somewhat	Undecided	Disagree Somewhat	Disagree Strongly
1. The short term of a trimester motivates students to work harder.	AS	A	U	D	DS
2. Two terms during the year, rather than three, would help students to perform better.	AS	A	U	D	DS
3. Students appreciate the opportunity to change teachers at the end of a trimester.	AS	A	U	D	DS
4. One trimester is too short a time to get to know a teacher.	AS	A	U	D	DS
5. Students like the opportunity to change courses at the end of a trimester.	AS	A	U	D	DS
6. Taking a course in a short trimester term makes for superficial learning.	AS	A	U	D	DS
7. Students have hardly any problems in transferring in from junior high school.	AS	A	U	D	DS
8. The longer class period of a trimester helps students achieve greater understanding.	AS	A	U	D	DS
9. The longer class period provides time for more variety in classroom activities.	AS	A	U	D	DS
10. In a trimester missing a few classes really sets a student back in his progress.	AS	A	U	D	DS
11. The lapse of time between sequential courses, such as Math. 10 and 20, is too long.	AS	A	U	D	DS
12. Students have difficulty in adjusting to the trimester system when they come from the junior-high school.	AS	A	U	D	DS
13. Students forget more when they cover a course in one trimester instead of in a longer period of time.	AS	A	U	D	DS
14. Students find the pace of instruction in a one-trimester course too fast.	AS	A	U	D	DS
15. One trimester is too short a time to get used to a teacher.	AS	A	U	D	DS
16. Students have too much homework in Lindsay Thurber.	AS	A	U	D	DS

APPENDIX C

PART B (continued)

	Agree Strongly	Agree Somewhat	Undecided	Disagree Somewhat	Disagree Strongly
17. Students fear failure more in a one-trimester course than they do for a course spread over more than one trimester.	AS	A	U	D	DS
18. The trimester system encourages students to attend classes regularly.	AS	A	U	D	DS
19. Students get sufficient assistance from teachers at Lindsay Thurber.	AS	A	U	D	DS
20. Tests are given too frequently at Lindsay Thurber.	AS	A	U	D	DS
21. Having final examinations three times a year is a good thing.	AS	A	U	D	DS
22. Students at Lindsay Thurber get to know their teachers quite well.	AS	A	U	D	DS
23. Teachers at Lindsay Thurber get to know their students quite well.	AS	A	U	D	DS
24. Teachers at Lindsay Thurber review previous work at the beginning of a trimester before going on to new work.	AS	A	U	D	DS
25. Students don't get to know fellow students well in courses which run for one trimester.	AS	A	U	D	DS
26. Students have no difficulty establishing friendships during a trimester.	AS	A	U	D	DS
27. Students find difficulty in adjusting to the trimester program when they transfer in from another high school.	AS	A	U	D	DS
28. Students at Lindsay Thurber find it difficult to participate in extra-curricular activities.	AS	A	U	D	DS
29. Students at Lindsay Thurber have difficulty transferring to another high school.	AS	A	U	D	DS
30. The trimester system aids in the development of a good school spirit.	AS	A	U	D	DS
31. The trimester system provides students with the opportunity to plan their own program.	AS	A	U	D	DS
32. The trimester system results in better student achievement than do other arrangements.	AS	A	U	D	DS

APPENDIX C

Students

I would like to add comments about the following items on this
Questionnaire:

ITEM NO.COMMENTState briefly:

1. What you like most about the trimester system:

2. What you like least about the trimester system:

3. Have you found any problems as a result of the trimester system
operating at Lindsay Thurber? If yes, please explain.

Yes _____

No _____

APPENDIX C

PART D

Do you know of a student who withdrew from school for part of a trimester or more during this year? If so, what were the reasons?
Please check each one that applies.

-
- _____ 1. lost time due to illness
- _____ 2. lost time due to truancy
- _____ 3. dropped hopelessly behind in studies
- _____ 4. had chosen wrong courses
- _____ 5. lost interest in school
- _____ 6. wanted to work
- _____ 7. had problems with teachers
- _____ 8. did not like the trimester system
- _____ 9. other (specify) _____

PART E

Do you know of a student who transferred into Lindsay Thurber?
If so, did he/she have any problems? Explain please.

APPENDIX C

PART F

Do you know of a student who transferred from Lindsay Thurber to another high school? If so, did he/she experience any problems? Explain please.

PART G

Indicate your preference for each of the following by marking a 1 as your first choice and 2 as the second choice.

- 1. A ten month school year
- 2. A semester system: two terms
- 3. A trimester system: three terms

THANK YOU!

APPENDIX D

TABLE SHOWING THE NUMBER OF TEACHERS AND STUDENTS ATTENDING HIGH SCHOOLS IN THE EDMONTON PUBLIC SCHOOL DISTRICT AS AT OCTOBER 17th, 1975

SCHOOL	NO. OF TEACHERS FULL TIME EQUIVALENTS	NO. OF STUDENTS
Bonnie Doon	82.2	1801
Composite High School		
Eastglen	54.5	1185
Composite High School		
Harry Ainlay	94.4	1982
Composite High School		
Jasper Place	123	2507
Composite High School		
McNally	56.14	1191
Composite High School		
M.E. LaZerte *	83.89	1825
Composite High School		
Queen Elizabeth	75	1713
Composite High School		
Ross Sheppard *	72.43	1653
Composite High School		
Strathcona	50.78	1157
Composite High School		

APPENDIX D CONTINUED

TABLE SHOWING THE NUMBER OF TEACHERS AND STUDENTS ATTENDING HIGH
SCHOOLS IN THE EDMONTON PUBLIC SCHOOL DISTRICT AS AT OCTOBER 17th, 1975

EDMONTON PUBLIC SCHOOL DISTRICT AS AT OCTOBER 17th, 1975

SCHOOL	NO. OF TEACHERS FULL TIME EQUIVALENTS	NO. OF STUDENTS
T.D. Baker High School	17.21	213
Victoria Composite High School	83.85	1644
W.P. Wagner * High School	83	1097

* Non - semestered schools in the Edmonton Public School District

EDMONTON PUBLIC SCHOOL DISTRICT AS AT OCTOBER 17th, 1975

APPENDIX E

PROBLEMS ASSOCIATED WITH THE TRIMESTER SYSTEM AS REPORTED IN THE
OPEN ENDED SECTION OF THE QUESTIONNAIRE BY TRIMESTER TEACHERS

1. Trimester system does not work for some subjects. Music and typing need regular short practice, this is also the case in learning French.
2. In the teaching of English the trimester is too short for students to develop maturity.
3. Also in the teaching of English there is not enough time between classes for students to do the necessary reading.
4. Students missing classes because of illness suffer large set backs.
5. Insufficient time to establish personal relationships between teacher and student but this may be just that the school is too large.
6. L.T.C.H.S.' has just become a credit factory. The pace is too fast for genuine lasting learning.
7. In sport and games inter-school competitions are arranged to suit the semester system. For genuine fitness students should take physical education courses throughout the year.
8. Administrivia trebled.

APPENDIX F

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION



THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2E1

November 25, 1975

Dear Colleague:

Several months ago we were requested to begin a study of the trimester system of organization in an Alberta high school. As the study progressed, the question which arose in our minds was whether responses to questions would really differ if they were asked of persons in a school with a semester system of organization. We felt that the advantages and disadvantages perceived by staff and students working in a trimester system need not be peculiar to that system. Your assistance will help us to answer that question.

The attached questionnaire is identical to the one provided for students with the exception of the first page (Part A). It is also identical to the questionnaire used in the trimester school, with the exception that a number of the items were revised to read "semester" instead of "trimester."

We believe that the analysis of data obtained from your school will be of interest, and may be of some value to you. We should be able to provide a preliminary report to you as early as February 1, 1976.

Thank you for responding to this questionnaire. We also thank each one who gave of his/her time to administer the questionnaire to the sample of classes selected by your school.

Sincerely,

A handwritten signature in cursive script that reads "J. Bergen".

J.J. Bergen
D. Friesen
E.W. Ratsoy
(Professors in Educational Administration)

Encl.

APPENDIX G

HIGH SCHOOL STUDENT SURVEY

December, 1975

Please answer every question in this questionnaire. Do not supply your name.

PART A

1. Indicate the grade level in which you do most of your work at this time.

_____ 9
 _____ 10
 _____ 11
 _____ 12

2. Which of the following best describes your program?

_____ 1 vocational
 _____ 2 general
 _____ 3 business
 _____ 4 university entrance

3. What is your sex?

_____ male
 _____ female

4. How many years, including this year, have you been at this school?

_____ 1 _____ 3 _____ 5
 _____ 2 _____ 4

5. How many courses are you taking during the present semester?

_____ 1 _____ 3
 _____ 2 _____ 4

6. Indicate below what you plan to do after high school.

_____ 1 Attend an Institute of Technology
 _____ 2 Attend a Business School
 _____ 3 Attend University
 _____ 4 Attend a Community College
 _____ 5 Work
 _____ 6 Other _____

APIENDIX H

HIGH SCHOOL STAFF SURVEY

December, 1975

Please answer every question in this questionnaire. Do not supply your name.

PART A

1. What is your position?

Teacher	_____
Counsellor	_____
Department Head	_____
Vice Principal	_____
Principal	_____
Other (name)	_____

2. If you are teaching, what subjects do you teach? _____

3. How many years have you been a member of the staff of this school? _____

4. How many years of teaching and/or administrative experience have you had in total? _____

5. What is your level of professional preparation?

_____	1. Certificate but no degree
_____	2. B.Ed. or equivalent degree
_____	3. M.Ed. or equivalent degree
_____	4. Preparation beyond the M.Ed.

APPENDIX I
HIGH SCHOOL SURVEY

PART B

Think of the students you know in the school and indicate your agreement or disagreement with each of the following statements. Circle the response on the right that best describes how you feel about each statement	Agree Strongly	Agree Somewhat	Undecided	Disagree Somewhat	Disagree Strongly
1. The short term of a semester motivates students to work harder.	AS	A	U	D	DS
2. Courses spread over the full school year, rather than completed in one semester, would help students to perform better.	AS	A	U	D	DS
3. Students appreciate the opportunity to change teachers at the end of a semester.	AS	A	U	D	DS
4. One semester is too short a time to get to know a teacher.	AS	A	U	D	DS
5. Students like the opportunity to change courses at the end of a semester.	AS	A	U	D	DS
6. Completing a course in one semester makes for superficial learning.	AS	A	U	D	DS
7. Students have hardly any problems in transferring in from junior high school.	AS	A	U	D	DS
8. The longer class period of a semester helps students achieve greater understanding.	AS	A	U	D	DS
9. The longer class period provides time for more variety in classroom activities.	AS	A	U	D	DS
10. In a semester missing a few classes really sets a student back in his progress.	AS	A	U	D	DS
11. The lapse of time between sequential courses, such as Math. 10 and 20, is too long.	AS	A	U	D	DS
12. Students have difficulty in adjusting to the semester system when they come from the junior-high school.	AS	A	U	D	DS
13. Students forget more when they cover a course in one semester instead of in a longer period of time.	AS	A	U	D	DS
14. Students find the pace of instruction in a one-semester course too fast.	AS	A	U	D	DS
15. One semester is too short a time to get used to a teacher.	AS	A	U	D	DS
16. Students have too much homework in this school.	AS	A	U	D	DS

APPENDIX I

PART B (continued)		Agree Strongly	Agree Somewhat	Undecided	Disagree Somewhat	Disagree Strongly
17.	Students fear failure more in a one-semester course than they do for a course spread over more than one semester.	AS	A	U	D	DS
18.	The semester system encourages students to attend classes regularly.	AS	A	U	D	DS
19.	Students get sufficient assistance from teachers at this school.	AS	A	U	D	DS
20.	Tests are given too frequently at this school.	AS	A	U	D	DS
21.	Having final examinations twice a year is a good thing.	AS	A	U	D	DS
22.	Students at this school get to know their teachers quite well.	AS	A	U	D	DS
23.	Teachers at this school get to know their students quite well.	AS	A	U	D	DS
24.	Teachers at this school review previous work at the beginning of a semester before going on to new work.	AS	A	U	D	DS
25.	Students don't get to know fellow students well in courses which run for one semester	AS	A	U	D	DS
26.	Students have no difficulty establishing friendships during a semester.	AS	A	U	D	DS
27.	Students find difficulty in adjusting to the semester program at this school when they transfer in from another high school.	AS	A	U	D	DS
28.	Students at this school find it difficult to participate in extra-curricular activities.	AS	A	U	D	DS
29.	Students at this school have difficulty transferring to another high school.	AS	A	U	D	DS
30.	The semester system aids in the development of a good school spirit.	AS	A	U	D	DS
31.	The semester system provides students with the opportunity to plan their own program.	AS	A	U	D	DS
32.	The semester system results in better student achievement than do other arrangements.	AS	A	U	D	DS

APPENDIX I

PART C

I would like to add comments about the following items on this questionnaire:

ITEM NO.COMMENT

State briefly:

1. What you like most about the semester system at your school:

2. What you like least about the semester system at your school:

3. Have you found any problems as a result of the semester system operating at this school? Yes ____; No ____.
If yes, please explain.

4. Do you think that some courses are better taught (or should be taught) on an all-year basis rather than completed in one semester of study? Yes ____; No ____.
If yes, which courses?

APPENDIX I

PART D

Do you know any student who withdrew from school during this semester?
If so, what were the reasons? Please check each one that applies.

-
- _____ 1. lost time due to illness
- _____ 2. lost time due to truancy
- _____ 3. dropped hopelessly behind in studies
- _____ 4. had chosen wrong courses
- _____ 5. lost interest in school
- _____ 6. wanted to work
- _____ 7. had problems with teachers
- _____ 8. did not like the semester system
- _____ 9. other (specify) _____

PART E

1. Do you know of a student who transferred into this school at the beginning of the first or second semester? If so, did he/she have any problems? Please explain.
2. Do you know of a student who transferred into this school during a semester? If so, did he/she have any problems? Please explain.

APPENDIX I

PART F

Do you know of a student who transferred from this school to another high school? If so, did he/she experience any problems? Explain please.

PART G

Indicate your preference for each of the following by marking a 1 as your first choice and 2 as the second choice.

- _____ 1. A ten month school year
- _____ 2. A semester system: two terms
- _____ 3. A trimester system: three terms

PART H

1. Have you attended a school in which all or most courses were offered on a ten-month basis? Yes ____; No ____.
2. Have you attended a school in which all or most courses were offered on a trimester (or three-term) basis? Yes ____; No ____.

THANK YOU!

B30158